State of Utah
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

Michael O. Leavitt
Governor
Dianne R. Nielson, Ph.D.
Executive Director
Russell A. Roberts
Director

150 North 1950 West
P.O. Box 144820
Salt Lake City, Utah 84114-4820
(801) 536-4000
(801) 536-4099 Fax
(801) 538-4414 T.D.D.

DAQE-300-95

April 13, 1995

Dwayne Hirst
Olympia Sales Company
1537 South 700 West
Salt Lake City, Utah 84104

Re: Approval Order Revised To Meet The Ozone Maintenance Plan
Salt Lake County - CDS A1 NA - Toxic Major Title V Major

Dear Mr. Hirst:

The attached document is an Approval Order for the above referenced project.

Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Jon Black. He may be reached at (801) 536-4047.

Sincerely,

Russell A. Roberts, Executive Secretary
Utah Air Quality Board

RAR:JB:aj

cc: Salt Lake City/County Health Department
EPA Region VIII, Mike Owens

Printed on recycled paper

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

APPROVAL ORDER REVISED TO MEET THE OZONE MAINTENANCE PLAN

PREPARED BY: JON BLACK, ENGINEERING TECHNICIAN

REVIEWED BY: TIM BLANCHARD, ENGINEER

APPROVAL NUMBER
DAQE-300-95

Date: April 13, 1995

Source

OLYMPIA SALES COMPANY

Russell A. Roberts
Executive Secretary
Utah Air Quality Board

Abstract

Olympia Sales Company manufactures kitchen cabinets. They are located at 1537 South 700 West, Salt Lake City, Utah, which is a Nonattainment area for PM_{10}, SO_2, CO and Ozone. Olympia Sales possess a current Approval Order (AO) DAQE-0167-94 for its facility. The cabinet manufacturing facility is a major source of VOC emission, and will be required to meet Reasonable Available Control Technology (RACT). RACT will be imposed in order to comply with the requirements of the Ozone Maintenance Plan. RACT will require that all of the painting processes be equipped with High Volume Low Pressure (HVLP) paint guns. Olympia's conventional paint guns will all be replaced by the HVLP guns by November 15, 1995. Olympia will also be required to implement a maintenance and inspection plan which will record dates and times of inspections and repairs to the painting processes. The new employees will be required to go through a training period where an experienced painter is with the new painter at all times when spraying. The new employee shall not use the paint spraying equipment without supervision until they have shown that they are experienced and competent in performing the painting tasks which are required of them. Olympia has recently experimented with low VOC water based paints, and has found that problems of excessive drying time and below standard finish quality exist from use of these products. Olympia is continuing to research the new low VOC products on the market, but will not be required to use these products at this time. The emissions of concern from this facility will remain at 129 tons/yr of VOC, 32.8 tons/yr of Particulate and 28.4 tons/yr of PM_{10}. These emission totals have been modeled for the previous permit mentioned above. Therefore, further modeling will not be required. Because Olympia Sales is a major toxic source, a Title V permit will be required.

This project has been evaluated and found to be consistent with the requirements of the Utah Air Conservation Rules (UACR) and the Utah Air Conservation Act. A 30-day public comment period was held and all comments received were evaluated. The conditions of this AO reflect any changes to the proposed conditions which resulted from the evaluation of the comments received. This air quality AO authorizes the project with the following conditions, and failure to comply with any of the conditions may constitute a violation of this order.

General Conditions:

1. This AO applies to the following company:

   Olympia Cabinet Manufacturing and Sales Company
   1537 South 700 West
   Salt Lake City, Utah 84104
   (801) 972-4050

   The equipment listed below in this AO shall be operated at the following location:

   PLANT LOCATION:

   Olympia Cabinet Manufacturing and Sales Company
   1537 South 700 West
   Salt Lake City, Utah 84104

Universal Transverse Mercator (UTM) Coordinate System: 4,509,700 meters Northing, 422,900 meters Easting

2. Definitions of terms, abbreviations, and references used in this AO conform to those used in the UACR, Utah Administrative Codes (UAC), and Series 40 of the Code of Federal Regulations (40 CFR). These definitions take precedence unless specifically defined otherwise herein.

3. Olympia Cabinet Manufacturing and Sales Company shall operate the cabinet manufacturing facility according to the information submitted in the Notice of Intent dated January 5, 1995, and additional information submitted to the Executive Secretary dated February 24, 1995.

4. A copy of this AO shall be posted on site. The AO shall be available to the employees who operate the air emission producing equipment. These employees shall receive instruction, per condition #16 of this AO, as to their responsibilities in operating the equipment according to all of the relevant conditions listed below.

5. The approved installations shall consist of the following equipment:

   A. Five (5) Binks spray booths equipped with Andreae filters

   B. Three (3) cyclone dust collectors

      #1 - Mill Area operating at approximately 12,000 cfm
      #2 - Door Area operating at approximately 14,000 cfm
      #3 - Sanding Area operating at approximately 25,000 cfm

<u>Limitations and Tests Procedures</u>

6. Visible emissions from the #3 cyclone dust collector shall not exceed 10% opacity. Visible Emissions from any other point or fugitive emission source associated with the installation or control facilities shall not exceed 20% opacity. Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

7. The following operation limits shall not be exceeded without prior approval in accordance with R307-1-3.1, UAC:

   A. 16 hours per day
   B. 4160 hours per 12-month period

   Compliance with the annual limitations shall be determined on a rolling 12-month total. Based on the first day of each month, a new 12-month total shall be calculated using data from the previous 12 months.

Records of operation shall be kept for all periods when the plant is in operation. Records of operation shall be made available to the Executive Secretary or his representative upon request, and shall include a period of two years ending with the date of the request. The records shall be kept on a daily basis. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log.

Volatile Organic Compounds (VOC) Limitations.

8. Each paint spray booth shall be equipped with a set of paint arrestor particulate filters to control particulate emissions or equivalent. All air exiting the booth shall pass through a control system before being vented to the atmosphere. Equivalency shall be determined by the Executive Secretary.

9. Full paint and solvent barrels shall be kept in a proper storage room. The barrels shall have sealed lids until they are ready to be used in the painting operation. Once a paint barrel becomes empty it shall be removed from the painting process and re-sealed with a lid. The empty barrels shall be placed in a storage area to await pickup.

10. The plantwide emissions of VOC and HAPS from the lacquer spray booths, solvent cleaning and associated surface coating operations shall not exceed:

129.0 tons per rolling 12-month period for VOC
104.6 tons per rolling 12-month period for HAPs

This value shall not be exceeded without prior approval in accordance with R307-1-3.1, UAC. Compliance with the limitation shall be determined on a rolling 12-month total. Based on the first day of each month a new 12-month total shall be calculated using data from the previous 12 months.

The plant-wide emissions of VOCs and HAPs shall be determined by maintaining a record of VOC and HAPs potential contained in materials used each month. The record shall include the following data for each item used:

A. List name of the VOC and HAPs emitting material, such as; paint, adhesive, solvent, thinner, reducers, chemical compounds, toxics, isocyanates, etc.

B. List the weight and use location of the VOC and HAPs potential (name of paint booth or plant facility) in the material in pounds per gallon.

C. List the percent by weight of all potential VOCs and HAPs each individual material listed in A. The recommended source of the information is from the manufacturer's MSDS[1] The owner/operator shall obtain MSDS data from manufacturer and retain information on-site.

[1]MSDS = Material Safety Data Sheets.

D. List the amount and location of materials listed in A that are used on a daily basis and summed for every location and for the entire plant each month.

E. To calculate the amount of VOCs and HAPs potential contained in the material listed in D use the following procedure:

$$\text{VOC or HAPs} = \frac{(\text{\% Volatile by Weight})}{(100)} \times \frac{(\text{Density lb})}{(\text{gal})} \times \frac{(\text{Gal Consumed})}{} \times \frac{(1\text{ ton})}{(2{,}000\text{ lb})}$$

F. The amount of VOCs and HAPs potential contained in materials disposed of as solid or hazardous waste for the month shall be quantified and subtracted from the quantities calculated above, to provide the monthly total VOC and HAPs emissions put into the air. (It is assumed that all VOC and HAPs potential in material that are applied to a product evaporate and are considered emissions.

G. Records of consumption and emissions shall be kept for all periods when the plant is in operation. Records of consumption shall be made available to the Executive Secretary upon request, and shall include a period of two years ending with the date of the request.

11. The owner/operator of this installation shall use best working practices to reduce coating and solvent emissions. This includes the following control measures:

A. Conversion of lacquers and other surface coatings to water-based compounds as practicable - The Executive Secretary shall be informed of the progress made in this area. The owner/operator shall submit a written report to the Executive Secretary each year by January 31.

B. Minimizing solvent usage - The Executive Secretary shall be informed of the progress made in this area. The owner/operator shall submit a written report to the Executive Secretary each year by January 31.

C. Storing volatile raw materials in tightly sealed containers.

12. All HAPs are subject to the annual Operating Permit Program if one of the following conditions is met:

A. The emissions of any one of the 189 HAPs listed in the 1990 Clean Air Act is over ten tons/yr.

B. The emissions of any combination of these HAPs are over 25 tons/yr.

13. This source is required to pay an annual emission fee upon start-up [or if an existing facility, upon issuance of this AO. The fee will be based on calculated annual emissions listed at the end of this AO. This fee is valid until inventory data for one year are available for the source.

The owner or operator of this source will be billed upon start-up for all emissions that are considered "chargeable" as of that date.

14. Olympia Cabinet Manufacturing and Sales Company shall use HVLP spray guns for all of their painting processes. These guns shall all be installed and be used by November 15, 1995.

Records & Miscellaneous

15. An Inspection and Maintenance Plan shall be used in the painting operation. This plan shall require that one time each month all pumps, piping, hoses and spray guns of each painting process shall be visually inspected for leakage. A chart shall be posted on the pump room wall of Olympia Cabinet Manufacturing and Sales Company which shall note the inspectors name, the date of the inspection, and the result of the inspection. The chart shall also record all maintenance of the pumps, piping, hoses and spray guns which takes place and the associated date. The plan shall be made available to the Executive Secretary or his representative upon request.

16. New employees shall be required to go through a training period where an experienced painter is present with the new painter at all times when spraying. The new employee shall be instructed in spraying techniques to give the best possible finish without wasting paint. They shall also be properly trained in inspection techniques which are addressed in the Inspection and Maintenance Plan. New employees shall not use the paint spraying equipment without supervision until they have shown that they are experienced and competent in performing the painting tasks required of them.

17. Records referenced in condition #7, condition #10 and condition #15 of this AO shall be made available to the Executive Secretary or his representative upon request. The records referenced shall consist of the following:

Condition #7 : (Operating hours)

A. Operating hours per day

Condition #10 : (Plantwide emissions of VOC)

A. Name and type of VOC emitting material
B. Weight of the material in pounds per gallon
C. Percent by weight of all VOCs for each material used
D. Amount of VOCs emitted on a monthly basis

Condition #15 : (Inspection and Maintenance Plan Chart)

A. Note the inspectors name
B. The date of the inspection
C. Result of the inspection

D. Maintenance that occurred and date

18. All installations and facilities authorized by this AO shall be adequately and properly maintained. All pollution control vendor recommended equipment shall be installed, maintained, and operated. Instructions from the vendor or established maintenance practices that maximize pollution control shall be used. All necessary equipment control and operating devices such as pressure gauges, amp meters, volt meters, flow rate indicators, temperature gauges, CEMs, etc., shall be installed and operated properly and easily accessible to compliance inspectors.

19. The owner/operator shall comply with R307-1-3.5, UAC. This rule addresses emission inventory reporting requirements.

20. The owner/operator shall comply with R307-1-4.7, UAC. This rule addresses unavoidable breakdown reporting requirements. The owner/operator shall calculate/estimate the excess emissions whenever a breakdown occurs. The total of excess emissions shall be reported to the Executive Secretary as directed for each calendar year.

21. The owner/operator shall submit to the Executive Secretary an emergency plan within 60 days of the date of this AO. The plan shall identify what control/production measures the owner/operator shall implement when an emergency episode is declared by the Executive Director of the Department of Environmental Quality. Specific emission reduction measures shall be outlined for all three levels (Alert, Warning, Emergency). The values for the various levels are listed in R307-1-5, UAC. The emergency plan shall be approved by the Executive Secretary. The Alert Level actions to be taken should be curtailment of all unnecessary activities causing air pollution. The other two levels of actions should be a progressive curtailment of production and activities causing pollution, to the point of complete shutdown of operations.

22. The owner/operator shall comply with all the applicable requirements implemented in conjunction with the Ozone State Implementation Plan (SIP).

Any future modifications to the equipment approved by this order must also be approved in accordance with R307-1-3.1.1, UAC.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including the UACR.

Annual emissions for this source (the entire plant) are currently calculated at the following values:

	Pollutant	Tons/yr
A.	Particulate	32.8
B.	PM_{10}	28.4
C.	SO_2	0.0

D.	NO_x	0.6
E.	CO	0.3
F.	VOC	129.0

The following HAPs are included in the VOC emission rate listed above:

A.	Toluene	50.2
B.	Xylene	19.5
C.	Ethylbenzene	0.1
D.	Methylethylketone	0.01
E.	Methylisobutylketone	29.3
F.	Formaldehyde	0.3
G.	Ethylene glycol monopropylether	5.2

These calculations are for the purposes of determining the applicability of Prevention of Significant Deterioration and Nonattainment area major source requirements of the UACR. Except for VOC they are not to be used for purposes of determining compliance.

In accordance with the requirements of Title V of the 1990 Clean Air Act, the following pollutants may be subject to an operating permit fee. Both the fees rate and the class of pollutants are subject to change by state, the federal agencies, or both.

	Pollutant	Tons/yr
A.	PM_{10}	28.4
B.	NO_x	0.6
C.	VOC	129.0

Approved By:

Russell A. Roberts, Executive Secretary
Utah Air Quality Board

State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

Michael O. Leavitt
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Salt Lake City, Utah 84114-4820
(801) 536-4000
(801) 536-4099 Fax
(801) 538-4414 T.D.D.

FILE COPY

DAQE-189-95

March 7, 1995

Newspaper Agency Corporation
Legal Advertising Department
P. O. Box 45838
Salt Lake City, Utah 84145

This letter will confirm the authorization to publish the attached NOTICE with the Salt Lake Tribune and Deseret News on March 10, 1995.

Please mail the invoice and affidavit of publication to the Utah State Department of Environmental Quality, Division of Air Quality, P.O. Box 144820, Salt Lake City, Utah 84114-4820.

Sincerely,

Diane Nielson
Office Technician
Division of Air Quality

dn

Enclosure

Printed on recycled paper

NOTICE

The following notice of intent to construct, submitted in accordance with Section 3.1, Utah Air Conservation Rules, has been received for consideration by the Executive Secretary, Utah Air Quality Board:

1. Dwayne Hirst

   Olympia Sales Company

   1537 South 700 West

   Salt Lake City, Utah 84104

   Permit Modification to Meet Standards of the Ozone Maintenance Plan

   Salt Lake County

Annual Emission for This Source (The Entire Plant) Are Currently Calculated at the Following Values:

Particulate	32.8
PM_{10}	28.4
SO_2	0.0
NO_X	0.6
CO	0.3
VOC	129.0

The engineering evaluation and air quality impact analysis have been completed and no adverse air quality impacts are expected. It is the intent of the Executive Secretary to approve the construction project.

The construction proposal and estimates of the effect on local air quality are available for public inspection and comment at the Division of Air Quality, Utah State Department of Environmental Quality, 150 North 1950 West, Salt Lake City, Utah 84114-4820. Written comments received by the Division,

at the same address on or before April 8, 1995, will be considered in making the final decision on the approval/disapproval of the proposed construction.

If anyone so requests to the Executive Secretary in writing, within 15 days of publication of the Notice, a hearing will be held to explain the project and technical rationale for proposed action. A hearing will be scheduled as close as practicable to the proposed project location. Comments obtained during a hearing will be evaluated and considered by the Executive Secretary before making a final decision on the approval/disapproval of the project.

Date of Notice: March 10, 1995

UTAH DIVISION OF AIR QUALITY
NEW/MODIFIED SOURCE PLAN REVIEW

Dwayne Hirst
Olympia Sales company
1537 South 700 West
Salt Lake City, Utah 84104

RE:	Modification of Approval Order to Meet Standards of the Ozone Maintenance Plan Salt Lake County, CDS A1, NA; TOXICS MAJOR, TITLE V MAJOR
ENGINEER:	Jon L. Black, Engineering Technician
DATE:	February 24, 1995
NOTICE OF INTENT DATED:	February 24, 1995
PLANT CONTACT:	Dwayne Hirst
PHONE NUMBER: FAX NUMBER	(801) 972-4050 (801) 972-1827
PLANT LOCATION:	1537 South 700 West, Salt Lake City, Utah
UTM COORDINATES:	4,509,700 m. Northing; 422,900 m. Easting

FEES:

Basic Approval Order Fee	$000.00
Review Engineer - 0 total hours at $50.00/hour	$000.00
Modeler - 0 hours at $50.00/hour	$000.00
Notice To Paper	$80.00
Travel - 00 miles at $0.23/mile	$000.00
TOTAL	**$80.00**

APPROVALS:

Review Engineer _____ _____
(Signature & Date)

We request that you read the proposed Approval Order conditions; if you do not understand or do not agree with the contents of the conditions, please contact the review engineer within five days. However, when you understand the attached proposed/draft Approval Order conditions, please sign below and return. Thank You.

Applicant Contact _____
(Signature & Date)

F:\AQ\ENGINEER\JBLACK\WP\REVIEWS\OLYMPIA.RVW

4.2.5-14

TYPE OF IMPACT AREA

Attainment Area ..... No

Nonattainment Area
- PM_{10} ..... Yes
- SO_2 ..... Yes
- NO_x ..... No
- CO ..... Yes
- Ozone ..... Yes

NSPS ..... No

NESHAP ..... No

Toxic Pollutants ..... Yes

toluene, xylene, ethyl benzene, methyl ethyl ketone, methyl isobutyl ketone, formaldehyde

Toxic Major Source ..... Yes

[> 10 tpy of any one Hazardous Air Pollutant (HAP) or > 25 tpy of any combination of HAPs]

New Major Source ..... No
Major Modification ..... No
PSD Permit ..... No
PSD Increment ..... No
(modeling)

Send to EPA ..... Yes
Operating Permit Program ..... Yes

FOR MODIFIED SOURCES

The Notice of Intent is for a modification to an existing source. The following standards apply in this review:

NSPS applies to modification? . . . . . No
PSD review of entire source required? . . . . . No
NESHAPS applies to modification? . . . . . No
TOXICS involved in modification? . . . . . No
TITLE V required for entire source? . . . . . Yes
TOXIC MAJOR for modification? . . . . . No
NONATT MAJOR for entire source? . . . . . Yes

Abstract

Olympia Sales Company manufactures kitchen cabinets. They are located at 1537 South 700 West, Salt Lake City, Utah, which is a Nonattainment area for PM_{10}, SO_2, CO and Ozone. Olympia Sales possess a current Approval Order (AO) DAQE-0167-94 for its facility. The cabinet manufacturing facility is a major source of VOC emission and will be required to meet Reasonable Available Control Technology (RACT). RACT will be imposed in order to comply with the requirements of the Ozone Maintenance Plan. RACT will require that all of the painting processes be equipped with High Volume Low Pressure (HVLP) paint guns. Olympia's conventional paint guns will all be replaced by the HVLP guns by November 15, 1995. Olympia will also be required to implement a maintenance and inspection plan which will record dates and times of inspections and repairs to the painting processes. The new employees will be required to go through a training period where an experienced painter is with the new painter at all times when spraying. The new employee shall not use the paint spraying equipment without supervision until they have shown that they are experienced and competent in performing the painting tasks which are required of them. Olympia has recently experimented with low VOC water based paints and has found that problems of excessive drying time and below standard finish quality exist from use of these products. Olympia is continuing to research the new low VOC products on the market but will not be required to use these products at this time. The emissions of concern from this facility will remain at 129 tons/yr of VOC, 32.8 tons/yr of Particulate and 28.4 tons/yr of PM_{10} These emission totals have been modeled for the previous permit mentioned above. Therefore, further modeling will not be required. Because Olympia Sales is a major toxic source, a Title V permit will be required.

I. DESCRIPTION OF PROPOSAL

Olympia Sales Company is a manufacturer of wood kitchen cabinets. They have been operating in Salt Lake City since 1956. Over the years their production level has fluctuated with the demand for kitchen cabinets but their overall configuration has remained basically the same.

With the implementation of the Ozone Maintenance Plan, major sources of VOC are required to meet standards developed in RACT. These standards further aid in limiting VOC emission and require sources to make a few changes in their operations. The changes which will be addressed will be the following:

1. All painting processes will be required to install HVLP spray guns
2. Implementation of an Inspection and Maintenance Plan
3. Continual research in usage of low VOC paints
4. Employee training procedures
5. Paint barrel storage
6. Record keeping

II. EMISSION SUMMARY

The emissions from this source (the entire plant) will be as follows:

Pollutant	Current Emissions tons/year	Emission Increases tons/year	Total Emissions tons/year
Particulate	32.80	0.00	32.80
PM_{10}	28.40	0.00	28.40

SO_2	0.00	0.00	0.00
NO_x	0.60	0.00	0.60
CO	0.30	0.00	0.30
VOC	129.00	0.00	129.00

The HAPs included in the VOC emission rate listed above:

Toluene	50.2	0.00	50.2
Xylene	19.5	0.00	19.5
Ethylbenzene	0.1	0.00	0.1
Methylethylketone	0.01	0.00	0.01
Methylisobutylketone	29.3	0.00	29.3
Formaldehyde	0.3	0.00	0.3
Ethylene glycol monopropylether	5.2	0.00	5.2

III. REASONABLE AVAILABLE CONTROL TECHNOLOGY (RACT) ANALYSIS

The Clean Air Act Amendments of 1990 require this type of coating operation to employ Reasonable Available Control Technology (RACT). RACT is defined as devices, systems process modification, or other apparatus or techniques that are reasonable available taking into account (1) the necessity of imposing such controls in order to attain and maintain a national ambient air quality standard, (2) the social, environmental and economic impact of such controls, and (3) alternative means of providing for attainment and maintenance of such standard. The draft CTG document, Appendix B. 'Preliminary Draft Model Rule For Wood Furniture Finishing And Cleaning Operations', dated April 1994 , was used as a guide in the RACT determination. RACT for this source shall be as follows:

HVLP Spray Guns

Olympia has consented to purchase new Graco H.E.L.P. HVLP spray guns for all of their painting processes. These guns will all be purchased and installed by November 15, 1995.

Inspection and Maintenance Plan

Once each month all pumps, piping, hoses and guns of each painting process will be visually inspected for leakage. A chart will be posted on the pump room wall of Olympia Sales Company which will note the inspectors name, the date of the inspection, and the result of the inspection. The chart will also record any maintenance which takes place and the associated date.

New Employee Training

New employees will be required to go through a training period where an experienced painter is present with the new painter at all times when spraying. The new employee shall be instructed in spraying techniques to give the best possible finish without wasting paint. They shall also be properly trained in inspection techniques which are addressed in the Inspection and Maintenance Plan. New employees shall not use the paint spraying equipment without supervision until they have shown that they are experienced and competent in performing the painting tasks which they are asked to do.

Paint Barrel Storage

Full paint and solvent barrels are stored inside a room, which has a two hour fire rating, with sealed lids until they are ready to be used in the painting operation. The barrels are attached to the painting process

with a covered lid. Once the paint barrel becomes empty it is removed from the process and re-sealed with their lid. The empty barrels are placed in a storage area for pickup.

Paint Booth and Gun Cleaning

Olympia has five spray booths for applying coatings to wood. Each spray booth is equipped with a negative pressure filter system for the removal of particulates. The booths themselves are cleaned by scraping off the overspray material. No solvents are used in cleaning the spray booths. The paint gun tips are the only part of the gun cleaned at the Olympia location. The tips are removed and cleaned by soaking them in a small can (6-12 oz.) of T-6 solvent. When guns require further cleaning they are sent out to other locations.

Low VOC Water-based Coatings

Olympia will be required to experiment further with the implementation of low VOC water-based coatings. Each year Olympia will be required to submit a report analyzing the newest coatings tested by their facility. Because new technology does not come out on a timely basis, Olympia will be required to test new low VOC coatings or water-based coatings as they become available. Therefore, Olympia's annual report may at times consist of why no new tests were done.

IV. APPLICABILITY OF FEDERAL REGULATIONS, UTAH ADMINISTRATIVE CODES (UAC), AND CLEAN AIR ACT AMENDMENTS OF 1990.

This Notice of Intent is for an existing source. It is not a new major source or a major modification. The following federal regulations and state rules have been examined to determine their applicability to this Notice of Intent:

1. R307-1-3.1, UAC - Notice of Intent required for a modified source. This rule applies.

2. R307-1-3.1.5, UAC - Continuous program of construction required to begin within eighteen months of Approval Order date. If a continuous program of construction is not proceeding, the Executive Secretary may revoke the Approval Order.

3. R307-1-3.1.8 (A), UAC - Application of best available control technology (BACT) required for this facility. This rule shall not apply. However, the CAAA of 1990, Section 172, requires that this source apply RACT. The CTG draft model rule for wood furniture finishing and cleaning operations, Appendix B, was used as a guide in the RACT determination.

4. R307-1-3.1.8 (C), UAC - Approval of the Utah Air Quality Board (UAQB) is required before the Executive Secretary can approve a source under Section 3.6.5 that consumes more than 50% of a PSD increment. This rule does not apply to this NOI because a PSD permit is not being issued.

5. R307-1-3.2.1, UAC - Particulate emission limitations for existing sources that are located in a nonattainment area. This rule has been superseded by the Section IX, Parts A and H of the SIP except for Weber County. The effective date is November 15, 1990. Sources listed in Weber County are as follows:

   A. Farmers Grain Coop
   B. Fife Rock Products
   C. Interpace Corporation

D.. Parsons Asphalt Plant
E. Pillsbury Company
F. Teledyne Incinerator
G. Gibbons and Reed Asphalt

This source is not listed in the SIP. Therefore, this rule does not apply.

6. R307-1-3.3.2, UAC - Review requirements for new major sources or major modifications that are located in a nonattainment area or which impact a nonattainment area. This Notice of Intent does not represent a new major source or a major modification. Therefore, this rule will not apply.

7. R307-1-3.3.3.B (2), UAC - Enforceable offset of 1.2:1 required for new sources or modifications that would produce an emission increase greater than or equal to 50.00 tons per year of any combination of PM_{10}, SO_2, and NO_x. This is required in Salt Lake, Davis, and Utah Counties and in any area that affects these three counties as defined in the rule. The effective date is November 15, 1990. This modification does not affect the emissions from this facility, therefore this rule will not apply.

8. R307-1-3.3.3.C, UAC - Enforceable offset of 1.15:1 required for new sources or modifications of sources as defined in Section 182 of the CAA. Section 182(b)(1)(A)(i) of the CAA defines these sources as sources of volatile organic compounds and as sources of oxides of nitrogen. This is required in Salt Lake, Davis, and Utah Counties and in any area that affects these three counties as defined in the rule. The effective date is August 16, 1993. This rule does not apply.

9. R307-1-3.5, UAC - Emission inventory reporting requirements. This rule requires any source that emits 25 tons or more per year of any pollutant or any Part 70 source to submit an emission inventory to the Division of Air Quality every year or as determined necessary by the Executive Secretary. This source must comply with this rule.

10. R307-1-3.6.3, UAC - Prevention of Significant Deterioration (PSD) Increment Consumption - This rule lists the allowable PSD increment consumption. Under the PSD rules, the entire state has been triggered for Particulate (TSP), SO_2, and NO_x. The allowable increments are as follows:

Particulate (TSP) ($\mu g/m^3$)

	Three Hour	24 Hour	Annual
Class I Area	N/A	10	5
Class II Area	N/A	37	19

SO_2 ($\mu g/m^3$)

Class I Area	25	5	2
Class II Area	512	91	20

NO_x ($\mu g/m^3$)

Class I Area	N/A	N/A	2.5
Class II Area	N/A	N/A	25

There are also Class III increments, which do not apply in Utah. The above increments apply at all locations, unless the area is already nonattainment. The entire increment may not be available at all locations due to previously permitted sources consuming increment.

11. R307-1-3.6.5 (b), UAC - Prevention of Significant Deterioration (PSD) review requirements for new major sources or major modifications. This Notice of Intent does not represent a new major source or a major modification under PSD rules. Therefore, this rule does not apply.

12. R307-1-3.6.6, UAC - Increment violations. This rule requires the UAQB to promulgate a plan and implement rules to eliminate any PSD increment violations that occur in the state. No known violations have yet occurred. This proposed Notice of Intent is located in Salt Lake County which is an attainment area for NO_x. The emissions of NO_x from this source are negligible and will not cause a increment violation.

13. R307-1-3.7, UAC - Air Quality Modeling - All estimates of ambient concentrations required in meeting the requirements of the regulations shall be based on appropriate air quality models, data bases, and other requirements specified in the Utah Guidelines to Air Quality Models. Modeling analysis is not routinely performed for air pollution sources with emissions below the following levels:

Criteria for Screen Modeling
(≥ Tons per Year)

TSP	10
PM_{10}	5
SO_2	20
NO_2	20
CO	50
VOC	20
O_3	5

14. R307-1-3.8, UAC - Stack height rule. This rule limits the creditable height of stacks to that height determined to be good engineering practice. The formulas used to determine good engineering practice are found in 40 CFR 51.100. The maximum creditable height of 65 meters (213.2 feet) is allowed. Olympia Sales has no stacks that exceed 65 meters in height. This facility is in compliance with this rule.

15. R307-1-3.10, UAC - Visibility screening analysis requirements. This rule requires all new major sources or major modifications to undergo a visibility screening analysis to determine visibility impact on any mandatory Class I area. This Notice of Intent does not represent a new major source or a major modification under UACR rules. Therefore, this rule does not apply.

16. R307-1-4.1.2, UAC - 20% opacity limitation at all emission points. Unless a more stringent limitation is required by New Source Performance Standards (NSPS) or BACT or National Emission Standards for Hazardous Air Pollutants (NESHAPS). In this case, an opacity limitation of 10% is recommended as BACT for the cyclone dust collector.

17. R307-1-4.1.9, UAC - EPA Method 9 shall be used for visible emission observations. This rule applies.

18. R307-1-4.2.1, UAC - Sulfur content limitations in oil and coal used for combustion.

This source, emission point, does not use oil or coal for combustion. This rule does not apply.

19. R307-1-4.6, UAC - Continuous Emission Monitoring Systems Program - Reporting and technical requirements for continuous emission monitoring systems. It covers breakdowns and quarterly reports for continuous monitoring systems. Section 4.6.5 states that this regulation applies to the following:

    A. Sources required to install a CEMS as required by the following documents:

        1) NSPS
        2) State Implementation Plan
        3) Approval Order
        4) Consent Decree
        5) Administrative Orders and Agreements

    B. Any source that constructs after the promulgation of this rule two or more emission points, which may interfere with VEOs, shall install an opacity monitor on each stack.

20. R307-1-4.7, UAC - Unavoidable breakdown reporting requirements. This rule applies. Section 4.7.1 discusses reporting requirements. A breakdown for any period longer than two hours must be reported to the Executive Secretary within three hours of the beginning of the breakdown, if reasonable, but in no case longer than 18 hours after the beginning of the breakdown. A written report is required within seven calendar days. The report shall include the estimated quantity of pollutants (total and excess). R307-1-4.7.2 discusses penalties.

21. R307-1-4.9, UAC - Review requirements for volatile organic compound (VOC) sources located in an ozone nonattainment area. For sources located in ozone nonattainment areas (Salt Lake and Davis Counties) this rule specifies the minimum (RACT) control measures promulgated by the Utah Air Quality Board. In addition, UACR 3.1.1 requires application of BACT for all new or modified sources in the state. However, within an ozone nonattainment area BACT can not be less stringent than RACT. Therefore, for ozone nonattainment areas the more stringent requirement is applicable (i.e., BACT as required by UACR 3.1.1 or RACT as defined by rule 4.9).

    This rule applies only in Salt Lake and Davis Counties. The process is not specifically covered in this section. RACT conditions will be imposed which consist of (1) all painting processes will be required to install HVLP spray guns, (2) implementation of an Inspection and Maintenance Plan, (3) continual research in usage of low VOC paints and water-based coatings, (4) employee training procedures and (5) paint barrel storage.

22. R307-1-5, UAC - Emergency episode requirements. This rule requires the Executive Secretary to determine the stage and extent of an air pollution episode based on pollution levels and meteorological conditions. Under Section 40 of the Code of Federal Regulations, Part 51, Subpart H (51.150 to 153), it is required that sources plan emergency measures based upon the severity of the nonattainment area in which they operate. In Utah, these rules require that CO sources in CO nonattainment areas and sources of ozone precursors in ozone nonattainment areas, who emit at least 25 tons per year (SIP Section VII.B.) of either pollutant, submit an Emergency Episode Plan which provides for additional pollution reductions in the event of an Air Pollution Alert.

Warning or Emergency Episode. These plans can include total shut-down of the process. (Some sources are required to submit an emergency episode plan according to Section VII.B. of the SIP). This rule applies.

23. 40 CFR, Part 60 - New Source Performance Standards (NSPS) - There is no NSPS for this industrial process.

24. 40 CFR, Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAP) - There is no NESHAP for this industrial process.

25. 40 CFR, Part 50 - National Ambient Air Quality Standards (NAAQS) - This source is located in Salt Lake County, which is a nonattainment area for PM_{10}, SO_2, ozone, and CO (Salt Lake City only).

    For VOC emissions, there is no model that can predict an ozone impact directly from VOC emissions. However, since VOCs are precursors to ozone formation, this new source will contribute to the existing exceedences of the ozone standard in Davis or Salt Lake County. The amount of that contribution has not been decided. The ozone nonattainment area of Davis and Salt Lake Counties must show reasonable further progress toward attainment of the standard. This source, along with all other VOC sources having emissions above ten tons per year, may have to apply more controls to lower the VOC emissions. This would be a SIP change action.

26. 40 CFR 60.14, Definition of Modification - Any physical or operational change to an existing facility that results in an increase in the emission rate to the atmosphere of any pollutant to which an NSPS standard applies. This review is modification to implement RACT to meet the Ozone Maintenance Plan.

27. 40 CFR 60.15, Definition of Reconstruction - This Notice of Intent is not a reconstruction.

28. R307-1-1, Definition of Major Modification - It means any physical change in or changes in the method of operation of a major source that would result in a significant net emission increase of any pollutant. A net emissions increase that is significant for VOC shall be considered significant for ozone. This Notice of Intent is not a major modification.

V. RECOMMENDED APPROVAL ORDER CONDITIONS

General Conditions:

1. This AO applies to the following company:

   Olympia Cabinet Manufacturing and Sales Company
   1537 South 700 West
   Salt Lake City, Utah 84104
   (801) 972-4050

   The equipment listed below in this AO shall be operated at the following location:

   PLANT LOCATION:

   Olympia Cabinet Manufacturing and Sales Company
   1537 South 700 West
   Salt Lake City, Utah 84104

   Universal Transverse Mercator (UTM) Coordinate System: 4,509,700 meters Northing, 422,900 meters Easting

2. Definitions of terms, abbreviations, and references used in this AO conform to those used in the UACR, Utah Administrative Codes (UAC), and Series 40 of the Code of Federal Regulations (40 CFR). These definitions take precedence unless specifically defined otherwise herein.

3. Olympia Cabinet Manufacturing and Sales Company shall operate the cabinet manufacturing facility according to the information submitted in the Notice of Intent dated January 5, 1995 and additional information submitted to the Executive Secretary dated February 24, 1995..

4. A copy of this AO shall be posted on site. The AO shall be available to the employees who operate the air emission producing equipment. These employees shall receive instruction, per condition 16 of this AO, as to their responsibilities in operating the equipment according to all of the relevant conditions listed below.

5. The approved installations shall consist of the following equipment:

   A. Five (5) Binks spray booths equipped with Andreae filters

   B. Three (3) cyclone dust collectors

      #1 - Mill Area operating at approximately 12,000 cfm
      #2 - Door Area operating at approximately 14,000 cfm
      #3 - Sanding Area operating at approximately 25,000 cfm

Limitations and Tests Procedures

6. Visible emissions from the #3 cyclone dust collector shall not exceed 10% opacity. Visible Emissions from any other point or fugitive emission source associated with the installation or control facilities shall not exceed 20% opacity. Opacity observations of

emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

7. The following operation limits shall not be exceeded without prior approval in accordance with R307-1-3.1, UAC:

   A. 16 hours per day
   B. 4160 hours per 12-month period

   Compliance with the annual limitations shall be determined on a rolling 12-month total. Based on the first day of each month, a new 12-month total shall be calculated using data from the previous 12 months. Records of operation shall be kept for all periods when the plant is in operation. Records of operation shall be made available to the Executive Secretary or his representative upon request, and shall include a period of two years ending with the date of the request. The records shall be kept on a daily basis. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log.

Volatile Organic Compounds (VOC) Limitations

8. Each paint spray booth shall be equipped with a set of paint arrestor particulate filters to control particulate emissions or equivalent. All air exiting the booth shall pass through a control system before being vented to the atmosphere. Equivalency shall be determined by the Executive Secretary.

9. Full paint and solvent barrels shall be kept in a proper storage room. The barrels shall have sealed lids until they are ready to be used in the painting operation. Once a paint barrel becomes empty it shall be removed from the painting process and re-sealed with a lid. The empty barrels shall be placed in a storage area to await pickup.

10. The plantwide emissions of VOC and HAPS from the lacquer spray booths, solvent cleaning and associated surface coating operations shall not exceed:

    129.0 tons per rolling 12-month period for VOC
    104.6 tons per rolling 12-month period for HAPs

    This value shall not be exceeded without prior approval in accordance with R307-1-3.1, UAC. Compliance with the limitation shall be determined on a rolling 12-month total. Based on the first day of each month a new 12-month total shall be calculated using data from the previous 12 months.

    The plant-wide emissions of VOCs and HAPs shall be determined by maintaining a record of VOC and HAPs potential contained in materials used each month. The record shall include the following data for each item used:

    A. List name of the VOC and HAPs emitting material, such as: paint, adhesive, solvent, thinner, reducers, chemical compounds, toxics, isocyanates, etc.

    B. List the weight and use location of the VOC and HAPs potential (name of paint booth or plant facility) in the material in pounds per gallon

    C. List the percent by weight of all potential VOCs and HAPs each individual material listed in A. The recommended source of the information is from the

manufacturer's MSDS[1] The owner/operator shall obtain MSDS data from manufacturer and retain information on-site..

D. List the amount and location of materials listed in A that are used on a daily basis and summed for every location and for the entire plant each month

E. To calculate the amount of VOCs and HAPs potential contained in the material listed in D use the following procedure:

$$\text{VOC or HAPs} = \frac{(\%\ \text{Volatile by Weight})}{(100)} \times \frac{(\text{Density lb})}{(\text{gal})} \times \frac{(\text{Gal Consumed})}{(2{,}000\ \text{lb})} \times \frac{(1\ \text{ton})}{}$$

F. The amount of VOCs and HAPs potential contained in materials disposed of as solid or hazardous waste for the month shall be quantified and subtracted from the quantities calculated above, to provide the monthly total VOC and HAPs emissions put into the air. (It is assumed that all VOC and HAPs potential in material that are applied to a product evaporate and are considered emissions.

G. Records of consumption and emissions shall be kept for all periods when the plant is in operation. Records of consumption shall be made available to the Executive Secretary upon request, and shall include a period of two years ending with the date of the request.

11. The owner/operator of this installation shall use best working practices to reduce coating and solvent emissions. This includes the following control measures:

A. Conversion of lacquers and other surface coatings to water-based compounds as practicable - The Executive Secretary shall be informed of the progress made in this area. The owner/operator shall submit a written report to the Executive Secretary each year by January 31.

B. Minimizing solvent usage - The Executive Secretary shall be informed of the progress made in this area. The owner/operator shall submit a written report to the Executive Secretary each year by January 31.

C. Storing volatile raw materials in tightly sealed containers.

12. All HAPs are subject to the annual Operating Permit Program if one of the following conditions is met:

A. The emissions of any one of the 189 HAPs listed in the 1990 Clean Air Act is over 10 tons/yr

B. The emissions of any combination of these HAPs are over 25 tons/yr

13. This source is required to pay an annual emission fee upon start-up [or if an existing facility, upon issuance of this AO. The fee will be based on calculated annual emissions listed at the end of this AO. This fee is valid until inventory data for one year are available for the source. The owner or operator of this source will be billed upon start-up for all emissions that are considered "chargeable" as of that date.

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[1]MSDS = Material Safety Data Sheets.

14. Olympia Cabinet Manufacturing and Sales Company shall use HVLP spray guns for all of their painting processes. These guns shall all be installed and be used by November 15, 1995.

Records & Miscellaneous

15. An Inspection and Maintenance Plan shall be used in the painting operation. This plan shall require that one time each month all pumps, piping, hoses and spray guns of each painting process shall be visually inspected for leakage. A chart shall be posted on the pump room wall of Olympia Cabinet Manufacturing and Sales Company which shall note the inspectors name, the date of the inspection, and the result of the inspection. The chart shall also record all maintenance of the pumps, piping, hoses and spray guns which takes place and the associated date. The plan shall be made available to the Executive Secretary or his representative upon request.

16. New employees shall be required to go through a training period where an experienced painter is present with the new painter at all times when spraying. The new employee shall be instructed in spraying techniques to give the best possible finish without wasting paint. They shall also be properly trained in inspection techniques which are addressed in the Inspection and Maintenance Plan. New employees shall not use the paint spraying equipment without supervision until they have shown that they are experienced and competent in performing the painting tasks required of them.

17. Records referenced in condition #7, condition #10 and condition #15 of this Approval Order shall be made available to the Executive Secretary or his representative upon request. The records referenced shall consist of the following:

Condition #7 : (Operating hours)

A. Operating hours per day

Condition #10 : (Plantwide emissions of VOC)

A. Name and type of VOC emitting material
B. Weight of the material in pounds per gallon
C. Percent by weight of all VOCs for each material used
D. Amount of VOCs emitted on a monthly basis

Condition #15 : (Inspection and Maintenance Plan Chart)

A. Note the inspectors name
B. The date of the inspection
C. Result of the inspection
D. Maintenance that occurred and date

18. All installations and facilities authorized by this AO shall be adequately and properly maintained. All pollution control vendor recommended equipment shall be installed, maintained, and operated. Instructions from the vendor or established maintenance practices that maximize pollution control shall be used. All necessary equipment control and operating devices such as pressure gauges, amp meters, volt meters, flow rate indicators, temperature gauges, CEMs, etc., shall be installed and operated properly and easily accessible to compliance inspectors.

19. The owner/operator shall comply with R307-1-3.5, UAC. This rule addresses emission inventory reporting requirements.

20. The owner/operator shall comply with R307-1-4.7, UAC. This rule addresses unavoidable breakdown reporting requirements. The owner/operator shall calculate/estimate the excess emissions whenever a breakdown occurs. The total of excess emissions shall be reported to the Executive Secretary as directed for each calendar year.

21. The owner/operator shall submit to the Executive Secretary an emergency plan within 60 days of the date of this AO. The plan shall identify what control/production measures the owner/operator shall implement when an emergency episode is declared by the Executive Director of the Department of Environmental Quality. Specific emission reduction measures shall be outlined for all three levels (Alert, Warning, Emergency). The values for the various levels are listed in R307-1-5, UAC. The emergency plan shall be approved by the Executive Secretary. The Alert Level actions to be taken should be curtailment of all unnecessary activities causing air pollution. The other two levels of actions should be a progressive curtailment of production and activities causing pollution, to the point of complete shutdown of operations.

22. The owner/operator shall comply with all the applicable requirements implemented in conjunction with the Ozone State Implementation Plan (SIP).

Any future modifications to the equipment approved by this order must also be approved in accordance with R307-1-3.1.1, UAC.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including the UACR.

Annual emissions for this source (the entire plant) are currently calculated at the following values:

	Pollutant	Tons/yr
A.	Particulate	32.8
B.	PM_{10}	28.4
C.	SO_2	0.0
D.	NO_x	0.6
E.	CO	0.3
F.	VOC	129.0

The following HAPs are included in the VOC emission rate listed above:

A.	Toluene	50.2
B.	Xylene	19.5
C.	Ethylbenzene	0.1
D.	Methylethylketone	0.01
E.	Methylisobutylketone	29.3
F.	Formaldehyde	0.3
G.	Ethylene glycol monopropylether	5.2

These calculations are for the purposes of determining the applicability of Prevention of Significant Deterioration (PSD) and nonattainment area major source requirements of the UACR. Except for VOC they are not to be used for purposes of determining compliance.

In accordance with the requirements of Title V of the 1990 Clean Air Act, the following pollutants may be subject to an operating permit fee. Both the fees rate and the class of pollutants are subject to change by state, the federal agencies, or both.

	Pollutant	Tons/yr
A.	PM_{10}	28.4
B.	NO_x	0.6
C.	VOC	129.0

This is a very brief description of how Olympia's paint operations is being managed to limit VOC's.

Paint Guns-

Olympia started changing spray guns over to air assisted airless guns in 1993 and will have all production paint guns changed by October 1995.

Paint Barrels-

All barrels of paint and solvent are covered at all times.

Maintenance-

The entire paint system is checked for leaks at least once each week and repaired within three days unless new parts are needed, that maintenance cannot locate in Salt Lake and then repairs are made as the needed materials become available.

Cleaning-Booths and Guns-

Small amounts of organic solvents are used to clean booths and guns - 8 to 12 oz. Per day, approximately 3 gallons of solvent are used each week to flush out the paint pumps and piping, but this solvent is put into drums for disposal. Therefore, VOC's are not released.

Training-

All new painters are given several hours of instruction covering spraying technique to give the best possible finish without wasting paint.

Paint and Stains-

See MSDS sheets.

12 Drums/mo

CHEMCENTRAL
SALT LAKE CITY

CHEMCENTRAL/Salt Lake City 2465 South 1100 West Woods Cross, Utah 84087 (801) 292-0437 FAX (801) 298-7529

ILYMPIA SALES
537 SOUTH 7TH WEST
SALT LAKE CITY, UT 84104

March 01, 1994

ATTN: Safety Director

Dear Customer,

This letter is to inform you that the product listed below that we supply you contains one or more of the toxic chemicals covered by Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986. This law requires certain manufacturers to report on annual emissions of specified toxic chemicals and chemical categories.

If you are unsure if you must report, or require further information, call the EPA Emergency Planning and Community Right-to-Know Hotline : (8) 535-0202 or (202) 479-2449 (in Washington DC or Alaska).

Please attach this letter to the Material Safety Data Sheet(s) for this product. Please also note that if you repackage or otherwise redistribute this product to industrial customers, this letter must accompany the MSDS.

Our Product	Name
016603	5238 GUARDSMAN BLEND 392#/55 GAL EA EX DRS

Toxic Chemical	C.A.S. #	Percent BY WEIGHT
ETHYL BENZENE *	100-41-4	4.06%
METHYL ISOBUTYL KETONE	108-10-1	18.73%
TOLUENE *	108-88-3	60.95%
XYLENE *	1330-20-7	16.26%

GUARDSMAN mix 30 To 1 Guardsman Blend 8 gal./mo.

Guardsman Products, Inc. MATERIAL SAFETY DATA SHEET

D: IF PREPARATION: 01/08/94

MANUFACTURERS NAME: GUARDSMAN PRODUCTS, INC.

MANUFACTURERS ADDRESS: 13535 MONSTER ROAD
SEATTLE, WA 98178

EMERGENCY/INFORMATION
PHONE NO.: (206)772-6550

24-HOUR EMERGENCY RESPONSE
PHONE: CHEMTREC 800-424-9300

SECTION I: PRODUCT INFORMATION

PRODUCT NAME: LIGHT WIPE STAIN
MANUFACTURERS CODE IDENTIFICATION: 525-0573
PRODUCT CLASS: PIGMENT STAIN

HMIS RATING
HEALTH: 2 FLAMMABILITY: 3
REACTIVITY: 0 PERS. PROTECT: _

SECTION II: HAZARDOUS INGREDIENTS

INGREDIENT/(CAS NO.)	% WGT.	OCCUPATIONAL EXPOSURE LIMITS TLV	PEL	OTHER	UNITS	VAPOR PRES. MM HG
ISOBUTYL ALCOHOL (78-83-1)	3	50	50		PPM	8.80
+XYLENE (1330-20-7)*	49	100	100		PPM	6.60
ISOBUTYL ISOBUTYRATE (97-85-8)	8	NE	NE	NE		3.20
AROMATIC HYDROCARBON-HISOL 2(8030-30-6*)	31	NE	NE	350	MG/M3	

KEY TO ABBREVIATIONS USED:

+: SARA III - SECTION 313 TOXIC CHEMICAL
SK: TOXIC EFFECTS CAN OCCUR BY SKIN ABSORPTION
NE: NOT ESTABLISHED CE: CEILING LIMIT
OTHER: RECOMMENDED TLV

SECTION III: PHYSICAL DATA

EVAPORATION RATE: FASTER X SLOWER THAN ETHER 4.2.5-32
VAPOR DENSITY: X HEAVIER LIGHTER THAN AIR
BOILING RANGE: 226 TO 340 DEG F PRODUCT V.O.C.: 6.61 LB/GAL (793 G/L)

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: FLAMMABLE LIQUID CLASS IB

LOWER EXPLOSIVE LIMIT: 1.00

FLASH POINT: 55 DEG F METHOD USED: TCC

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE OR DRY CHEMICAL. WATER FOG MAY LESSEN FIRE INTENSITY.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND, COLLECT IN LOW AREAS, OR MAY IGNITE AT DISTANT LOCATIONS. DO NOT WELD ON OR NEAR CONTAINER, EVEN WHEN EMPTY.

SPECIAL FIRE FIGHTING PROCEDURES:
DURING EMERGENCY CONDITIONS, DECOMPOSITION PRODUCTS CAN CAUSE HEALTH HAZARD. USE SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE SHIELD OPERATED IN PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE.

SECTION V: HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE: SEE FURTHER PRECAUTION STATEMENTS ON LABEL (PAGE 4).

ACUTE AND CHRONIC HEALTH EFFECTS:
EYES: CAN CAUSE IRRITATION, REDNESS, TEARING, BLURRED VISION.
IN: PROLONGED OR REPEATED CONTACT CAN CAUSE IRRITATION, DEFATTING, DERMATITIS.
INHALATION: EXCESSIVE INHALATION OF VAPORS CAN CAUSE RESPIRATORY IRRITATION, DIZZINESS, HEADACHE, NAUSEA AND ASPHYXIATION.
INGESTION: SWALLOWING CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, DIARRHEA. ASPIRATION OF MATERIAL INTO LUNGS CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.

OTHER HEALTH EFFECTS:
REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

EMERGENCY FIRST AID PROCEDURES:
EYES: FLUSH WITH LARGE QUANTITIES OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION.
SKIN: WASH AFFECTED AREAS WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. CONSULT A PHYSICIAN IF IRRITATION PERSISTS.
INHALATION: REMOVE TO FRESH AIR. RESTORE BREATHING. TREAT SYMPTOMATICALLY. GET MEDICAL ATTENTION.
INGESTION: OBTAIN IMMEDIATE MEDICAL ASSISTANCE TO DETERMINE BEST EMERGENCY TREATMENT.

SECTION VI: REACTIVITY DATA

STABILITY: UNSTABLE X STABLE
HAZARDOUS POLYMERIZATION: MAY OCCUR X WILL NOT OCCUR
HAZARDOUS DECOMPOSITION PRODUCTS:
IN CASE OF THERMAL DECOMPOSITION, CARBON DIOXIDE AND CARBON MONOXIDE WILL FORM.
CONDITIONS TO AVOID:
AVOID HIGH TEMPERATURES, DIRECT HEATING.
INCOMPATIBILITY (MATERIALS TO AVOID):
AVOID CONTACT WITH STRONG OXIDIZING AGENTS.

SECTION VII: SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
ELIMINATE ALL SOURCES OF IGNITION. CONTAIN SPILL AND ABSORB WITH ABSORBANT MATERIAL SUCH AS SAND. SHOVEL INTO DRUMS OR OTHER SUITABLE CONTAINERS USING NON-SPARKING TOOLS. NOTIFY APPROPRIATE AUTHORITIES IF SPILL ENTERS ENVIRONMENT.

WASTE DISPOSAL METHOD:
INCINERATE IN AN APPROVED FACILITY OR DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

SECTION VIII: SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:
IF TLV OF ANY COMPONENT IS EXCEEDED, USE AN APPROPRIATE NIOSH/MSHA APPROVED RESPIRATOR. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
PROVIDE SUFFICIENT MECHANICAL AND/OR LOCAL VENTILATION TO MAINTAIN EXPOSURE LEVELS BELOW THE TLV. APPLICATION AREAS SHOULD BE VENTILATED IN ACCORDANCE WITH OSHA REGULATION #29CFR1910.107D.

PROTECTIVE GLOVES:
USE NEOPRENE, RUBBER OR PLASTIC GLOVES TO PREVENT SKIN CONTACT.

EYE PROTECTION:
USE SAFETY GLASSES WITH SIDE SHIELDS.

OTHER PROTECTIVE EQUIPMENT:
SAFETY SHOWERS AND EYE BATH.

SECTION IX: SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
KEEP AWAY FROM EXCESSIVE HEAT, SPARKS, AND OPEN FLAME. KEEP CLOSURES TIGHT WHEN NOT IN USE. KEEP CONTAINERS UPRIGHT TO PREVENT LEAKAGE.

OTHER PRECAUTIONS:
CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTY CONTAINERS RETAIN RESIDUES, ALL HAZARD PRECAUTIONS MUST BE OBSERVED.
DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER.
CONTAINERS OF THIS MATERIAL MUST BE PROPERLY GROUNDED WHEN POURING.
IF CONTENTS ARE COMBINED WITH OTHER MATERIALS SUCH AS THINNERS, CATALYSTS, ETC, OBSERVE ALL PRECAUTIONS.
WHEN SPRAYING THIS MATERIAL, KEEP SPRAY BOOTH CLEAN. AVOID BUILDUP OF SPRAY DUST OR OVERSPRAY IN BOOTH OR DUCTS.

FOR INDUSTRIAL USE ONLY

SECTION X: SHIPPING AND LABEL INFORMATION

SHIPPING NAME: PAINT
DOT ID NO: UN1263 DOT HAZARD CLASS: 3 PG: II

PRECAUTIONARY LABEL STATEMENT: 0564B

WARNING! FLAMMABLE. HARMFUL IF INHALED. MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. CAUSES EYE, SKIN, NOSE AND THROAT IRRITATION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN.

CONTAINS ORGANIC SOLVENTS. KEEP AWAY FROM HEAT, SPARKS AND FLAME. VAPORS MAY CAUSE FLASH FIRE. CLOSE CONTAINER AFTER EACH USE. USE WITH ADEQUATE VENTILATION. DO NOT BREATHE VAPORS OR SPRAY MIST. WEAR AN APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNTIL FUMES ARE GONE, UNLESS AIR MONITORING DEMONSTRATES VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. WASH THOROUGHLY AFTER HANDLING.

FIRST AID: IN CASE OF EYE CONTACT, FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION; FOR SKIN, WASH THOROUGHLY WITH SOAP AND WATER. IF AFFECTED BY INHALATION OF VAPOR OR SPRAY MIST, REMOVE TO FRESH AIR. IF SWALLOWED, GET MEDICAL ATTENTION IMMEDIATELY.

IN CASE OF SPILLAGE, ABSORB WITH INERT MATERIAL AND DISPOSE OF IN ACCORDANCE WITH APPLICABLE REGULATIONS.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA BELIEVED TO BE RELIABLE BY GUARDSMAN PRODUCTS; IT IS TRUE AND ACCURATE TO THE BEST OF OUR KNOWLEDGE, BUT IS NOT INTENDED TO BE ALL INCLUSIVE. USERS SHOULD CONSIDER THIS INFORMATION AS A SUPPLEMENT TO OTHER INFORMATION GATHERED BY THEM AND MUST MAKE THEIR OWN DETERMINATION OF SUITABILITY AND COMPLETENESS TO ASSURE PROPER SAFE USE AND DISPOSAL OF THESE MATERIALS.

GUARDSMAN Mix 40 To 1 12 gal/mo.

Guardsman Products, Inc. Guardsman Blend MATERIAL SAFETY DATA SHEET

DATE OF PREPARATION: 02/03/94

MANUFACTURERS NAME: GUARDSMAN PRODUCTS, INC.

MANUFACTURERS ADDRESS: 13535 MONSTER ROAD
SEATTLE, WA 98178

EMERGENCY/INFORMATION
PHONE NO.: (206)772-6550

24-HOUR EMERGENCY RESPONSE
PHONE: CHEMTREC 800-424-9300

SECTION I: PRODUCT INFORMATION

PRODUCT NAME: GOLDEN MAPLE STAIN CONCENTRATE
MANUFACTURERS CODE IDENTIFICATION: 525-0077
PRODUCT CLASS: PIGMENT STAIN

HMIS RATING
HEALTH: 2 FLAMMABILITY: 3
REACTIVITY: 0 PERS. PROTECT: _

SECTION II: HAZARDOUS INGREDIENTS

INGREDIENT/(CAS NO.)	% WGT.	OCCUPATIONAL EXPOSURE LIMITS TLV	PEL	OTHER	UNITS	VAPOR PRES. MM HG
MINERAL SPIRITS (N.A.)	6	100	100		PPM	2.00
+BUTYL ALCOHOL (71-36-3)	2	50-SK	50-SK		PPM	4.00
ISOBUTYL ALCOHOL (78-83-1)	1	50	50		PPM	8.80
BUTYL ACETATE (123-86-4)	1	150	150		PPM	10.00
+ETHYL BENZENE (100-41-4)*	1	100	100		PPM	10.00
+XYLENE (1330-20-7) *	25	100	100		PPM	6.60
_/ . SPIRITS (8030-30-6*)	13	NE	NE	100	PPM	43.00

KEY TO ABBREVIATIONS USED:
+: SARA III - SECTION 313 TOXIC CHEMICAL
SK: TOXIC EFFECTS CAN OCCUR BY SKIN ABSORPTION
NE: NOT ESTABLISHED CE: CEILING LIMIT
*: OTHER: RECOMMENDED TLV

SECTION III: PHYSICAL DATA

EVAPORATION RATE: FASTER X SLOWER THAN ETHER 4.2.5-36
VAPOR DENSITY: X HEAVIER LIGHTER THAN AIR
BOILING RANGE: 201 TO 385 DEG F PRODUCT V.O.C.: 4.54 LB/GAL (545 G/L)
PERCENT VOLATILE BY VOLUME: 84 WEIGHT PER GALLON: 9.33 POUNDS

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: FLAMMABLE LIQUID CLASS IB

LOWER EXPLOSIVE LIMIT: 0.90

FLASH POINT: 20 DEG F METHOD USED: TCC

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE OR DRY CHEMICAL. WATER FOG MAY LESSEN FIRE INTENSITY.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND, COLLECT IN LOW AREAS, OR MAY IGNITE AT DISTANT LOCATIONS. DO NOT WELD ON OR NEAR CONTAINER, EVEN WHEN EMPTY.

SPECIAL FIRE FIGHTING PROCEDURES:
DURING EMERGENCY CONDITIONS, DECOMPOSITION PRODUCTS CAN CAUSE HEALTH HAZARD. USE SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE SHIELD OPERATED IN PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE.

SECTION V: HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE: SEE FURTHER PRECAUTION STATEMENTS ON LABEL (PAGE 4).

ACUTE AND CHRONIC HEALTH EFFECTS:
EYES: CAN CAUSE IRRITATION, REDNESS, TEARING, BLURRED VISION.
SKIN: PROLONGED OR REPEATED CONTACT CAN CAUSE IRRITATION, DEFATTING, DERMATITIS.
INHALATION: EXCESSIVE INHALATION OF VAPORS CAN CAUSE RESPIRATORY IRRITATION, DIZZINESS, HEADACHE, NAUSEA AND ASPHYXIATION.
INGESTION: SWALLOWING CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, DIARRHEA. ASPIRATION OF MATERIAL INTO LUNGS CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.

OTHER HEALTH EFFECTS:
REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

EMERGENCY FIRST AID PROCEDURES:
EYES: FLUSH WITH LARGE QUANTITIES OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION.
SKIN: WASH AFFECTED AREAS WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. CONSULT A PHYSICIAN IF IRRITATION PERSISTS.
INHALATION: REMOVE TO FRESH AIR. RESTORE BREATHING. TREAT SYMPTOMATICALLY. GET MEDICAL ATTENTION.
INGESTION: OBTAIN IMMEDIATE MEDICAL ASSISTANCE TO DETERMINE BEST EMERGENCY TREATMENT.

SECTION VI: REACTIVITY DATA

STABILITY: UNSTABLE X STABLE

HAZARDOUS POLYMERIZATION: MAY OCCUR X WILL NOT OCCUR

HAZARDOUS DECOMPOSITION PRODUCTS:
IN CASE OF THERMAL DECOMPOSITION, CARBON DIOXIDE AND CARBON MONOXIDE WILL [illegible]M.

CONDITIONS TO AVOID:
AVOID HIGH TEMPERATURES, DIRECT HEATING.

INCOMPATIBILITY (MATERIALS TO AVOID):
AVOID CONTACT WITH STRONG OXIDIZING AGENTS.

SECTION VII: SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
ELIMINATE ALL SOURCES OF IGNITION. CONTAIN SPILL AND ABSORB WITH ABSORBANT MATERIAL SUCH AS SAND. SHOVEL INTO DRUMS OR OTHER SUITABLE CONTAINERS USING NON-SPARKING TOOLS. NOTIFY APPROPRIATE AUTHORITIES IF SPILL ENTERS ENVIRONMENT.

WASTE DISPOSAL METHOD:
INCINERATE IN AN APPROVED FACILITY OR DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

SECTION VIII: SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:
IF TLV OF ANY COMPONENT IS EXCEEDED, USE AN APPROPRIATE NIOSH/MSHA APPROVED RESPIRATOR. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
PROVIDE SUFFICIENT MECHANICAL AND/OR LOCAL VENTILATION TO MAINTAIN EXPOSURE LEVELS BELOW THE TLV. APPLICATION AREAS SHOULD BE VENTILATED IN ACCORDANCE WITH OSHA REGULATION #29CFR1910.107D.

PROTECTIVE GLOVES:
USE NEOPRENE, RUBBER OR PLASTIC GLOVES TO PREVENT SKIN CONTACT.

EYE PROTECTION:
USE SAFETY GLASSES WITH SIDE SHIELDS.

OTHER PROTECTIVE EQUIPMENT:
SAFETY SHOWERS AND EYE BATH.

SECTION IX: SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
KEEP AWAY FROM EXCESSIVE HEAT, SPARKS, AND OPEN FLAME. KEEP CLOSURES TIGHT WHEN NOT IN USE. KEEP CONTAINERS UPRIGHT TO PREVENT LEAKAGE.

OTHER PRECAUTIONS:
CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTY CONTAINERS RETAIN RESIDUES, ALL HAZARD PRECAUTIONS MUST BE OBSERVED.
DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER.
CONTAINERS OF THIS MATERIAL MUST BE PROPERLY GROUNDED WHEN POURING.
IF CONTENTS ARE COMBINED WITH OTHER MATERIALS SUCH AS THINNERS, CATALYSTS, ETC, OBSERVE ALL PRECAUTIONS.
WHEN SPRAYING THIS MATERIAL, KEEP SPRAY BOOTH CLEAN. AVOID BUILDUP OF SPRAY DUST OR OVERSPRAY IN BOOTH OR DUCTS.

FOR INDUSTRIAL USE ONLY

SECTION X: SHIPPING AND LABEL INFORMATION

SHIPPING NAME: PAINT
DOT ID NO: UN1263 DOT HAZARD CLASS: 3 PG: II

PRECAUTIONARY LABEL STATEMENT: 0547A

DANGER! EXTREMELY FLAMMABLE. VAPORS MAY CAUSE FLASH FIRE. HARMFUL IF INHALED. MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. CAUSES EYE, SKIN, NOSE AND THROAT IRRITATION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN.

CONTAINS ORGANIC SOLVENTS. KEEP AWAY FROM HEAT, SPARKS AND FLAME. VAPORS CAN TRAVEL LONG DISTANCES AND MAY IGNITE EXPLOSIVELY. CLOSE CONTAINER AFTER EACH USE. USE WITH ADEQUATE VENTILATION. DO NOT BREATHE VAPORS OR SPRAY MIST. WEAR AN APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNTIL FUMES ARE GONE, UNLESS AIR MONITORING DEMONSTRATES VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. WASH THOROUGHLY AFTER HANDLING.

FIRST AID: IN CASE OF EYE CONTACT, FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION; FOR SKIN, WASH THOROUGHLY WITH SOAP AND WATER. IF AFFECTED BY INHALATION OF VAPOR OR SPRAY MIST, REMOVE TO FRESH AIR. IF SWALLOWED, GET MEDICAL ATTENTION IMMEDIATELY.

I ASE OF SPILLAGE, ABSORB WITH INERT MATERIAL AND DISPOSE OF IN ACCORDANCE WITH APPLICABLE REGULATIONS.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

T NFORMATION CONTAINED HEREIN IS BASED ON DATA BELIEVED TO BE RELIABLE BY G ..DSMAN PRODUCTS; IT IS TRUE AND ACCURATE TO THE BEST OF OUR KNOWLEDGE, BUT IS NOT INTENDED TO BE ALL INCLUSIVE. USERS SHOULD CONSIDER THIS INFORMATION AS A SUPPLEMENT TO OTHER INFORMATION GATHERED BY THEM AND MUST MAKE THEIR OWN DETERMINATION OF SUITABILITY AND COMPLETENESS TO ASSURE PROPER SAFE USE AND DISPOSAL OF THESE MATERIALS.

GUARDSMAN Mix 8 Tol 16 gal/mo
Guardsman Blend

Guardsman Products. Inc.

MATERIAL SAFETY DATA SHEET

A[illegible] OF PREPARATION: 04/30/94

[illegible]ACTURERS NAME: GUARDSMAN PRODUCTS, INC.

ANUFACTURERS ADDRESS: 13535 MONSTER ROAD
SEATTLE, WA 98178

EMERGENCY/INFORMATION
PHONE NO.: (206)772-6550

24-HOUR EMERGENCY RESPONSE
PHONE: CHEMTREC 800-424-9300

SECTION I: PRODUCT INFORMATION

RODUCT NAME: DRIFTWOOD CONC
ANUFACTURERS CODE IDENTIFICATION: 528-5002
RODUCT CLASS: PIGMENT STAIN

HMIS RATING
HEALTH: 2 FLAMMABILITY: 3
REACTIVITY: 0 PERS. PROTECT: _

SECTION II: HAZARDOUS INGREDIENTS

INGREDIENT/(CAS NO.)	% WGT.	OCCUPATIONAL EXPOSURE LIMITS TLV	PEL	OTHER	UNITS	VAPOR PRES. MM HG
ROPYLENE GLYCOL MONOMETHYL ETHER ACETATE(108-65-6)	7	NE	NE	NE		1.80
XYLENE (1330-20-7)*	10	100	100	150-ST	PPM	6.60
TOLUENE (108-88-3)*	4	50-SK	200		PPM	22.00
ITANIUM DIOXIDE (13463-67-7)	61	10	15		MG/M3	

EY TO ABBREVIATIONS USED:
+: SARA III - SECTION 313 TOXIC CHEMICAL
SK: TOXIC EFFECTS CAN OCCUR BY SKIN ABSORPTION
NE: NOT ESTABLISHED
OTHER: RECOMMENDED TLV
CE: CEILING LIMIT
ST: SHORT TERM EXPOSURE LIMIT

SECTION III: PHYSICAL DATA

VAPORATION RATE: FASTER X SLOWER THAN ETHER
APOR DENSITY: X HEAVIER LIGHTER THAN AIR
OILING RANGE: 230 TO 295 DEG F
PRODUCT V.O.C.: 3.35 LB/GAL (402 G/L)
ERCENT VOLATILE BY VOLUME: 45
WEIGHT PER GALLON: 15.84 POUNDS

4.2.5-40

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: FLAMMABLE LIQUID CLASS IB

LOWER EXPLOSIVE LIMIT: 1.00

FLASH POINT: 45 DEG F METHOD USED: TCC

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE OR DRY CHEMICAL. WATER FOG MAY LESSEN FIRE INTENSITY.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND, COLLECT IN LOW AREAS, OR MAY IGNITE AT DISTANT LOCATIONS. DO NOT WELD ON OR NEAR CONTAINER, EVEN WHEN EMPTY.

SPECIAL FIRE FIGHTING PROCEDURES:
DURING EMERGENCY CONDITIONS, DECOMPOSITION PRODUCTS CAN CAUSE HEALTH HAZARD. USE SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE SHIELD OPERATED IN PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE.

SECTION V: HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE: SEE FURTHER PRECAUTION STATEMENTS ON LABEL (PAGE 4).

ACUTE AND CHRONIC HEALTH EFFECTS:
EYES: CAN CAUSE IRRITATION, REDNESS, TEARING, BLURRED VISION.
SKIN: PROLONGED OR REPEATED CONTACT CAN CAUSE IRRITATION, DEFATTING, DERMATITIS.
INHALATION: EXCESSIVE INHALATION OF VAPORS CAN CAUSE RESPIRATORY IRRITATIL DIZZINESS, HEADACHE, NAUSEA AND ASPHYXIATION.
INGESTION: SWALLOWING CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, DIARRHEA. ASPIRATION OF MATERIAL INTO LUNGS CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.

OTHER HEALTH EFFECTS:
REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

EMERGENCY FIRST AID PROCEDURES:
EYES: FLUSH WITH LARGE QUANTITIES OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION.
SKIN: WASH AFFECTED AREAS WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. CONSULT A PHYSICIAN IF IRRITATION PERSISTS.
INHALATION: REMOVE TO FRESH AIR. RESTORE BREATHING. TREAT SYMPTOMATICALLY. GET MEDICAL ATTENTION.
INGESTION: OBTAIN IMMEDIATE MEDICAL ASSISTANCE TO DETERMINE BEST EMERGENCY TREATMENT.

SECTION VI: REACTIVITY DATA

STABILITY: UNSTABLE X STABLE
HAZARDOUS POLYMERIZATION: MAY OCCUR X WILL NOT OCCUR
HAZARDOUS DECOMPOSITION PRODUCTS:
IN CASE OF THERMAL DECOMPOSITION, CARBON DIOXIDE AND CARBON MONOXIDE WILL FORM.
CONDITIONS TO AVOID:
AVOID HIGH TEMPERATURES, DIRECT HEATING.
INCOMPATIBILITY (MATERIALS TO AVOID):
AVOID CONTACT WITH STRONG OXIDIZING AGENTS.

SECTION VII: SPILL OR LEAK PROCEDURES

S TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
ELIMINATE ALL SOURCES OF IGNITION. CONTAIN SPILL AND ABSORB WITH ABSORBANT MATERIAL SUCH AS SAND. SHOVEL INTO DRUMS OR OTHER SUITABLE CONTAINERS USING NON-SPARKING TOOLS. NOTIFY APPROPRIATE AUTHORITIES IF SPILL ENTERS ENVIRONMENT

WASTE DISPOSAL METHOD:
INCINERATE IN AN APPROVED FACILITY OR DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

SECTION VIII: SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:
IF TLV OF ANY COMPONENT IS EXCEEDED, USE AN APPROPRIATE NIOSH/MSHA APPROVED RESPIRATOR. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
PROVIDE SUFFICIENT MECHANICAL AND/OR LOCAL VENTILATION TO MAINTAIN EXPOSURE LEVELS BELOW THE TLV. APPLICATION AREAS SHOULD BE VENTILATED IN ACCORDANCE WITH OSHA REGULATION #29CFR1910.107D.

PROTECTIVE GLOVES:
USE NEOPRENE, RUBBER OR PLASTIC GLOVES TO PREVENT SKIN CONTACT.

EYE PROTECTION:
USE SAFETY GLASSES WITH SIDE SHIELDS.

OTHER PROTECTIVE EQUIPMENT:
SAFETY SHOWERS AND EYE BATH.

SECTION IX: SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
KEEP AWAY FROM EXCESSIVE HEAT, SPARKS, AND OPEN FLAME. KEEP CLOSURES TIGHT WHEN NOT IN USE. KEEP CONTAINERS UPRIGHT TO PREVENT LEAKAGE.

OTHER PRECAUTIONS:
CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTY CONTAINERS RETAIN RESIDUES, ALL HAZARD PRECAUTIONS MUST BE OBSERVED.
DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER.
CONTAINERS OF THIS MATERIAL MUST BE PROPERLY GROUNDED WHEN POURING.
IF CONTENTS ARE COMBINED WITH OTHER MATERIALS SUCH AS THINNERS, CATALYSTS, ETC, OBSERVE ALL PRECAUTIONS.
WHEN SPRAYING THIS MATERIAL, KEEP SPRAY BOOTH CLEAN. AVOID BUILDUP OF SPRAY DUST OR OVERSPRAY IN BOOTH OR DUCTS.

FOR INDUSTRIAL USE ONLY

SECTION X: SHIPPING AND LABEL INFORMATION

D. SHIPPING NAME: PAINT
DOT ID NO: UN1263 DOT HAZARD CLASS: 3 PG: II

PRECAUTIONARY LABEL STATEMENT: D6208

WARNING! FLAMMABLE. HARMFUL IF INHALED. MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. CAUSES EYE, SKIN, NOSE AND THROAT IRRITATION.

CONTAINS ORGANIC SOLVENTS. KEEP AWAY FROM HEAT, SPARKS AND FLAME. VAPORS MAY CAUSE FLASH FIRE. CLOSE CONTAINER AFTER EACH USE. USE WITH ADEQUATE VENTILATION. DO NOT BREATHE VAPORS OR SPRAY MIST. WEAR AN APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNTIL FUMES ARE GONE, UNLESS AIR MONITORING DEMONSTRATES VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. WASH THOROUGHLY AFTER HANDLING.

FIRST AID: IN CASE OF EYE CONTACT, FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION; FOR SKIN, WASH THOROUGHLY WITH SOAP AND WATER. IF AFFECTED BY INHALATION OF VAPOR OR SPRAY MIST, REMOVE TO FRESH AIR. IF SWALLOWED, GET MEDICAL ATTENTION IMMEDIATELY.

I USE OF SPILLAGE, ABSORB WITH INERT MATERIAL AND DISPOSE OF IN ACCORDANCE WITH APPLICABLE REGULATIONS.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

T INFORMATION CONTAINED HEREIN IS BASED ON DATA BELIEVED TO BE RELIABLE BY GUARDSMAN PRODUCTS; IT IS TRUE AND ACCURATE TO THE BEST OF OUR KNOWLEDGE, BUT IS NOT INTENDED TO BE ALL INCLUSIVE. USERS SHOULD CONSIDER THIS INFORMATION AS A SUPPLEMENT TO OTHER INFORMATION GATHERED BY THEM AND MUST MAKE THEIR OWN DETERMINATION OF SUITABILITY AND COMPLETENESS TO ASSURE PROPER SAFE USE AND DISPOSAL OF THESE MATERIALS.

GUARDSMAN

Guardsman Products, Inc.

MATERIAL SAFETY DATA SHEET

DATE OF PREPARATION: 01/21/94

MANUFACTURERS NAME: GUARDSMAN PRODUCTS, INC.

MANUFACTURERS ADDRESS: 13535 MONSTER ROAD
SEATTLE, WA 98178

EMERGENCY/INFORMATION
PHONE NO.: (206)772-6550

24-HOUR EMERGENCY RESPONSE
PHONE: CHEMTREC 800-424-9300

SECTION I: PRODUCT INFORMATION

PRODUCT NAME: RM VANGUARD CON/VAR
MANUFACTURERS CODE IDENTIFICATION: 531-1000-80
PRODUCT CLASS: CLEAR COATING

HMIS RATING
HEALTH: *2 FLAMMABILITY: 3
REACTIVITY: 0 PERS. PROTECT: _

SECTION II: HAZARDOUS INGREDIENTS

INGREDIENT/(CAS NO.)	% WGT.	OCCUPATIONAL EXPOSURE LIMITS TLV	PEL	OTHER	UNITS	VAPOR PRES. MM HG
+XYLENE (1330-20-7)	2	100	100		PPM	6.60
ETHYL ALCOHOL (64-17-5)	9	1000	1000		PPM	47.00
+METHYL ALCOHOL (67-56-1)	2	200-SK	200-SK		PPM	96.00
+BUTYL ALCOHOL (71-36-3)	11	50-SK	50-SK		PPM	4.00
+METHYL ETHYL KETONE (78-93-3)*	13	200	200		PPM	70.00
+METHYL ISOBUTYL KETONE (108-10-1)	22	50	50		PPM	15.00
PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE(108-65-6)	4	NE	NE	NE		1.80
TOLUENE (108-88-3)*	2	50-SK	100		PPM	22.00
N-BUTYL ALCOHOL (78-83-1)	1	50	50		PPM	8.80
+FORMALDEHYDE (50-00-0)*	TRACE	0.3-CE	0.75		PPM	

KEY TO ABBREVIATIONS USED:

+: SARA III - SECTION 313 TOXIC CHEMICAL
SK: TOXIC EFFECTS CAN OCCUR BY SKIN ABSORPTION
NE: NOT ESTABLISHED
CE: CEILING LIMIT
OTHER: RECOMMENDED TLV

SECTION III: PHYSICAL DATA

EVAPORATION RATE: FASTER X SLOWER THAN ETHER
VAPOR DENSITY: X HEAVIER LIGHTER THAN AIR
BOILING RANGE: 148 TO 295 DEG F
PRODUCT V.O.C.: 5.09 LB/GAL (611 G/L)
PERCENT VOLATILE BY VOLUME: 75
WEIGHT PER GALLON: 7.53 POUNDS

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: FLAMMABLE LIQUID CLASS IB

LOWER EXPLOSIVE LIMIT: 1.00

FLASH POINT: 21 DEG F METHOD USED: CC

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE OR DRY CHEMICAL. WATER FOG MAY LESSEN FIRE INTENSITY.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND, COLLECT IN LOW AREAS, OR MAY IGNITE AT DISTANT LOCATIONS. DO NOT WELD ON OR NEAR CONTAINER, EVEN WHEN EMPTY.

SPECIAL FIRE FIGHTING PROCEDURES:
DURING EMERGENCY CONDITIONS, DECOMPOSITION PRODUCTS CAN CAUSE HEALTH HAZARD. USE SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE SHIELD OPERATED IN PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE.

SECTION V: HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE: SEE FURTHER PRECAUTION STATEMENTS ON LABEL (PAGE 4).

ACUTE AND CHRONIC HEALTH EFFECTS:
EYES: CAN CAUSE IRRITATION, REDNESS, TEARING, BLURRED VISION.
SKIN: PROLONGED OR REPEATED CONTACT CAN CAUSE IRRITATION, DEFATTING, ERMATITIS.
INHALATION: EXCESSIVE INHALATION OF VAPORS CAN CAUSE RESPIRATORY IRRITA , DIZZINESS, HEADACHE, NAUSEA AND ASPHYXIATION.
INGESTION: SWALLOWING CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, DIARRHEA. ASPIRATION OF MATERIAL INTO LUNGS CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.

OTHER HEALTH EFFECTS:
REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.
FORMALDEHYDE IS A POTENTIAL CANCER HAZARD BASED ON TESTS ON LABORATORY ANIMALS, AND CAN CAUSE SENSITIZATION.

EMERGENCY FIRST AID PROCEDURES:
EYES: FLUSH WITH LARGE QUANTITIES OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION.
SKIN: WASH AFFECTED AREAS WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. CONSULT A PHYSICIAN IF IRRITATION PERSISTS.
INHALATION: REMOVE TO FRESH AIR. RESTORE BREATHING. TREAT SYMPTOMATICALLY. GET MEDICAL ATTENTION.
INGESTION: OBTAIN IMMEDIATE MEDICAL ASSISTANCE TO DETERMINE BEST EMERGENCY TREATMENT.

SECTION VI: REACTIVITY DATA

STABILITY: UNSTABLE X STABLE

HAZARDOUS POLYMERIZATION: MAY OCCUR X WILL NOT OCCUR

HAZARDOUS DECOMPOSITION PRODUCTS:
IN CASE OF THERMAL DECOMPOSITION, CARBON DIOXIDE AND CARBON MONOXIDE WILL FORM.

CONDITIONS TO AVOID:
AVOID HIGH TEMPERATURES, DIRECT HEATING.

INCOMPATIBILITY (MATERIALS TO AVOID):
AVOID CONTACT WITH STRONG OXIDIZING AGENTS.

SECTION VII: SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
ELIMINATE ALL SOURCES OF IGNITION. CONTAIN SPILL AND ABSORB WITH ABSORBANT MATERIAL SUCH AS SAND. SHOVEL INTO DRUMS OR OTHER SUITABLE CONTAINERS USING NON-SPARKING TOOLS. NOTIFY APPROPRIATE AUTHORITIES IF SPILL ENTERS ENVIRONMENT

WASTE DISPOSAL METHOD:
INCINERATE IN AN APPROVED FACILITY OR DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

SECTION VIII: SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:
IF TLV OF ANY COMPONENT IS EXCEEDED, USE AN APPROPRIATE NIOSH/MSHA APPROVED RESPIRATOR. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE.

VENTILATION:
PROVIDE SUFFICIENT MECHANICAL AND/OR LOCAL VENTILATION TO MAINTAIN EXPOSURE LEVELS BELOW THE TLV. APPLICATION AREAS SHOULD BE VENTILATED IN ACCORDANCE WITH OSHA REGULATION #29CFR1910.107D.

PROTECTIVE GLOVES:
USE NEOPRENE, RUBBER OR PLASTIC GLOVES TO PREVENT SKIN CONTACT.

EYE PROTECTION:
USE SAFETY GLASSES WITH SIDE SHIELDS.

OTHER PROTECTIVE EQUIPMENT:
SAFETY SHOWERS AND EYE BATH.

SECTION IX: SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
KEEP AWAY FROM EXCESSIVE HEAT, SPARKS, AND OPEN FLAME. KEEP CLOSURES TIGHT WHEN NOT IN USE. KEEP CONTAINERS UPRIGHT TO PREVENT LEAKAGE.

OTHER PRECAUTIONS:
CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTY CONTAINERS RETAIN RESIDUES, ALL HAZARD PRECAUTIONS MUST BE OBSERVED.
DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER.
CONTAINERS OF THIS MATERIAL MUST BE PROPERLY GROUNDED WHEN POURING.
IF CONTENTS ARE COMBINED WITH OTHER MATERIALS SUCH AS THINNERS, CATALYSTS, ETC, OBSERVE ALL PRECAUTIONS.
WHEN SPRAYING THIS MATERIAL, KEEP SPRAY BOOTH CLEAN. AVOID BUILDUP OF SPRAY DUST OR OVERSPRAY IN BOOTH OR DUCTS.

FOR INDUSTRIAL USE ONLY

SECTION X: SHIPPING AND LABEL INFORMATION

SHIPPING NAME: PAINT
DOT ID NO: UN1263 DOT HAZARD CLASS: 3 PG. II

PRECAUTIONARY LABEL STATEMENT: 05508

WARNING! FLAMMABLE. HARMFUL IF INHALED. MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. CAUSES EYE, SKIN, NOSE, THROAT AND LUNG IRRITATION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN.

CONTAINS ORGANIC SOLVENTS. KEEP AWAY FROM HEAT, SPARKS AND FLAME. VAPORS MAY CAUSE FLASH FIRE. CLOSE CONTAINER AFTER EACH USE. USE WITH ADEQUATE VENTILATION. DO NOT BREATHE VAPORS OR SPRAY MIST. WEAR AN APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNTIL FUMES ARE GONE, UNLESS AIR MONITORING DEMONSTRATES VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. WASH THOROUGHLY AFTER HANDLING.

FIRST AID: IN CASE OF EYE CONTACT, FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION; FOR SKIN, WASH THOROUGHLY WITH SOAP AND WATER. IF AFFECTED BY INHALATION OF VAPOR OR SPRAY MIST, REMOVE TO FRESH AIR. IF SWALLOWED, GET MEDICAL ATTENTION IMMEDIATELY.

IN CASE OF SPILLAGE, ABSORB WITH INERT MATERIAL AND DISPOSE OF IN ACCORDANCE WITH APPLICABLE REGULATIONS.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL. POTENTIAL CANCER HAZARD. CONTAINS FORMALDEHYDE WHICH CAN CAUSE SENSITIZATION. RISK OF CANCER DEPENDS ON DURATION AND LEVEL OF EXPOSURE.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA BELIEVED TO BE RELIABLE BY GUARDSMAN PRODUCTS; IT IS TRUE AND ACCURATE TO THE BEST OF OUR KNOWLEDGE, BUT IS NOT INTENDED TO BE ALL INCLUSIVE. USERS SHOULD CONSIDER THIS INFORMATION AS SUPPLEMENT TO OTHER INFORMATION GATHERED BY THEM AND MUST MAKE THEIR OWN DETERMINATION OF SUITABILITY AND COMPLETENESS TO ASSURE PROPER SAFE USE AND DISPOSAL OF THESE MATERIALS.

GUARDSMAN

13 Drums/mo

Guardsman Products, Inc.

MATERIAL SAFETY DATA SHEET

DATE OF PREPARATION: 04/20/94

MANUFACTURERS NAME: GUARDSMAN PRODUCTS, INC.

EMERGENCY/INFORMATION PHONE NO.: (206)772-6550

MANUFACTURERS ADDRESS: 13535 MONSTER ROAD
SEATTLE, WA 98178

24-HOUR EMERGENCY RESPONSE PHONE: CHEMTREC 800-424-9300

SECTION I: PRODUCT INFORMATION

PRODUCT NAME: RM VANGUARD SEALER

MANUFACTURERS CODE IDENTIFICATION: 579-6004

PRODUCT CLASS: LACQUER COATING

HMIS RATING
HEALTH: *3 FLAMMABILITY: 3
REACTIVITY: 0 PERS. PROTECT: _

SECTION II: HAZARDOUS INGREDIENTS

INGREDIENT/(CAS NO.)	% WGT.	OCCUPATIONAL EXPOSURE LIMITS TLV	PEL	OTHER	UNITS	VAPOR PRES. MM HG
XYLENE (1330-20-7)*	4	100	100	150-ST	PPM	6.6
TOLUENE (108-88-3)*	12	50-SK	200		PPM	22.0
METHYL ALCOHOL (67-56-1)	9	200-SK	200-SK	250-ST	PPM	96.0
THYL ALCOHOL (64-17-5)	9	1000	1000		PPM	47.0
BUTYL ALCOHOL (71-36-3)	5	50-SK	100		PPM	4.0
UTYL ACETATE (123-86-4)	3	150	150	200-ST	PPM	10.0
M L ETHYL KETONE (78-93-3)*	8	200	200	300-ST	PPM	70.0
L ISOBUTYL KETONE (108-10-1)*	12	50	100	75-ST	PPM	15.
AL L SPIRITS (8030-30-6*)	9	NE	NE	100	PPM	43.0
FORMALDEHYDE (50-00-0)*	0.4	0.3-CE	0.75	2-ST	PPM	

KEY TO ABBREVIATIONS USED:

*: SARA III - SECTION 313 TOXIC CHEMICAL
SK: TOXIC EFFECTS CAN OCCUR BY SKIN ABSORPTION
NE: NOT ESTABLISHED
CE: CEILING LIMIT
OTHER: RECOMMENDED TLV
ST: SHORT TERM EXPOSURE LIMIT

SECTION III: PHYSICAL DATA

VAPORATION RATE: FASTER X SLOWER THAN ETHER
APOR DENSITY: X HEAVIER LIGHTER THAN AIR
OILING RANGE: 140 TO 300 DEG F PRODUCT W.D.G.: 5.59 LB/GAL (671 G/L)
ERCENT VOLATILE BY VOLUME: 33 WEIGHT PER GALLON: 7.21 POUNDS

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: FLAMMABLE LIQUID CLASS IB

LOWER EXPLOSIVE LIMIT: 0.9%

FLASH POINT: 20 DEG F METHOD USED: TCC

EXTINGUISHING MEDIA:
FOAM, CARBON DIOXIDE OR DRY CHEMICAL. WATER FOG MAY LESSEN FIRE INTENSITY.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND, COLLECT IN LOW AREAS, OR MAY IGNITE AT DISTANT LOCATIONS. DO NOT WELD ON OR NEAR CONTAINER, EVEN WHEN EMPTY.

SPECIAL FIRE FIGHTING PROCEDURES:
DURING EMERGENCY CONDITIONS, DECOMPOSITION PRODUCTS CAN CAUSE HEALTH HAZARD. USE SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE SHIELD OPERATED IN PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE.

SECTION V: HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE: SEE FURTHER PRECAUTION STATEMENTS ON LABEL (PAGE 4).

ACUTE AND CHRONIC HEALTH EFFECTS:
INGESTION: SWALLOWING CAUSES INEBRIATION, HEADACHE, VOMITING, LEADING TO OVER ILLNESS, BLINDNESS, EVEN DEATH.
EYES: CAN CAUSE EYE BURNS, BLURRED VISION.
SKIN: LIQUID CAUSES IRRITATION. PROLONGED OR REPEATED CONTACT CAN CAUSE DEFATTING LEADING TO DERMATITIS.
INHALATION: EXCESSIVE INHALATION OF VAPORS CAN CAUSE RESPIRATORY IRRITATION, DIZZINESS, HEADACHE, VOMITING, UNCONSCIOUSNESS.

OTHER HEALTH EFFECTS:
REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.
FORMALDEHYDE IS A POTENTIAL CANCER HAZARD BASED ON TESTS ON LABORATORY ANIMALS, AND CAN CAUSE SENSITIZATION.

EMERGENCY FIRST AID PROCEDURES:
INGESTION: RINSE MOUTH. GIVE 1 TO 2 GLASSES OF WATER. CALL A PHYSICIAN FOR WAY TO INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.
EYES: FLUSH WITH PLENTY OF WATER FOR 15 MINUTES. GET MEDICAL ATTENTION.
SKIN: WASH AFFECTED AREA WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. CONSULT A PHYSICIAN IF IRRITATION PERSISTS.
INHALATION: REMOVE TO FRESH AIR. RESTORE BREATHING. TREAT SYMPTOMATICALLY. GET MEDICAL ATTENTION.

SECTION VI: REACTIVITY DATA

STABILITY: UNSTABLE X STABLE

HAZARDOUS POLYMERIZATION: MAY OCCUR X WILL NOT OCCUR

HAZARDOUS DECOMPOSITION PRODUCTS:
IN CASE OF THERMAL DECOMPOSITION, CARBON DIOXIDE AND CARBON MONOXIDE WILL FORM.

CONDITIONS TO AVOID:
AVOID HIGH TEMPERATURES, DIRECT HEATING.

INCOMPATIBILITY (MATERIALS TO AVOID):
AVOID CONTACT WITH STRONG OXIDIZING AGENTS.

SECTION VII: SPILL OR LEAK PROCEDURES

TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
ELIMINATE ALL SOURCES OF IGNITION. CONTAIN SPILL AND ABSORB WITH ABSORBANT MATERIAL SUCH AS SAND. SHOVEL INTO DRUMS OR OTHER SUITABLE CONTAINERS USING NON-SPARKING TOOLS. NOTIFY APPROPRIATE AUTHORITIES IF SPILL ENTERS ENVIRONMENT.

ASTE DISPOSAL METHOD:
INCINERATE IN AN APPROVED FACILITY OR DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS.

SECTION VIII: SPECIAL PROTECTION INFORMATION

ESPIRATORY PROTECTION:
IF TLV OF ANY COMPONENT IS EXCEEDED, USE AN APPROPRIATE NIOSH/MSHA APPROVED RESPIRATOR. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE.

ENTILATION:
PROVIDE SUFFICIENT MECHANICAL AND/OR LOCAL VENTILATION TO MAINTAIN EXPOSURE LEVELS BELOW THE TLV. APPLICATION AREAS SHOULD BE VENTILATED IN ACCORDANCE WITH OSHA REGULATION #29CFR1910.107D.

ROTECTIVE GLOVES:
USE NEOPRENE, RUBBER OR PLASTIC GLOVES TO PREVENT SKIN CONTACT.

YE PROTECTION:
USE SAFETY GLASSES WITH SIDE SHIELDS.

THER PROTECTIVE EQUIPMENT:
SAFETY SHOWERS AND EYE BATH AND APRON.

SECTION IX: SPECIAL PRECAUTIONS

TIONS TO BE TAKEN IN HANDLING AND STORING:
KEEP AWAY FROM EXCESSIVE HEAT, SPARKS, AND OPEN FLAME. KEEP CLOSURES TIGHT WHEN NOT IN USE. KEEP CONTAINERS UPRIGHT TO PREVENT LEAKAGE.

THER PRECAUTIONS:
CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTY CONTAINERS RETAIN RESIDUES, ALL HAZARD PRECAUTIONS MUST BE OBSERVED.
DO NOT CUT, PUNCTURE OR WELD ON OR NEAR CONTAINER.
CONTAINERS OF THIS MATERIAL MUST BE PROPERLY GROUNDED WHEN POURING.
IF CONTENTS ARE COMBINED WITH OTHER MATERIALS SUCH AS THINNERS, CATALYSTS, ETC, OBSERVE ALL PRECAUTIONS.
WHEN SPRAYING THIS MATERIAL, KEEP SPRAY BOOTH CLEAN. AVOID BUILDUP OF SPRAY DUST OR OVERSPRAY IN BOOTH OR DUCTS.

DANGER: CONTAINS METHANOL - POISON
CANNOT BE MADE NON-POISONOUS
VAPOR HARMFUL
MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED

FOR INDUSTRIAL USE ONLY

SECTION X: SHIPPING AND LABEL INFORMATION

D. SHIPPING NAME: PAINT
DOT ID NO: UN1263 DOT HAZARD CLASS: 3 PG: II

PRECAUTIONARY LABEL STATEMENT: D166A

DANGER! EXTREMELY FLAMMABLE. VAPORS MAY CAUSE FLASH FIRE. HARMFUL IF INHALED. MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED. CAUSES EYE, SKIN, NOSE, THROAT AND LUNG IRRITATION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN.

CONTAINS ORGANIC SOLVENTS AND METHANOL. KEEP AWAY FROM HEAT, SPARKS AND FLAME. VAPORS CAN TRAVEL LONG DISTANCES AND MAY IGNITE EXPLOSIVELY. CLOSE CONTAINER AFTER EACH USE. USE WITH ADEQUATE VENTILATION. DO NOT BREATHE VAPORS OR SPRAY MIST. WEAR AN APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNTIL FUMES ARE GONE, UNLESS AIR MONITORING DEMONSTRATES VAPOR/MIST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. WASH THOROUGHLY AFTER HANDLING.

FIRST AID: IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. GET MEDICAL ATTENTION. THOROUGHLY CLEAN CONTAMINATED CLOTHING AND SHOES BEFORE REUSE. IN CASE OF EYE CONTACT, FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION; FOR SKIN, WASH THOROUGHLY WITH SOAP AND WATER. IF AFFECTED BY INHALATION OF VAPOR OR SPRAY MIST, REMOVE TO FRESH AIR. IF SWALLOWED, INDUCE VOMITING IMMEDIATELY AS DIRECTED BY MEDICAL PERSONNEL. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. IF SWALLOWED, GET MEDICAL ATTENTION IMMEDIATELY.

IN CASE OF SPILLAGE, ABSORB WITH INERT MATERIAL AND DISPOSE OF IN ACCORDANCE WITH APPLICABLE REGULATIONS.

NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL. POTENTIAL CANCER HAZARD. CONTAINS FORMALDEHYDE WHICH CAN CAUSE SENSITIZATION. RISK OF CANCER DEPENDS ON DURATION AND LEVEL OF EXPOSURE. CONTAINS METHANOL AND CANNOT BE MADE NONPOISONOUS. INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA BELIEVED TO BE RELIABLE BY GUARDSMAN PRODUCTS; IT IS TRUE AND ACCURATE TO THE BEST OF OUR KNOWLEDGE, BUT IS NOT INTENDED TO BE ALL INCLUSIVE. USERS SHOULD CONSIDER THIS INFORMATION AS A SUPPLEMENT TO OTHER INFORMATION GATHERED BY THEM AND MUST MAKE THEIR OWN DETERMINATION OF SUITABILITY AND COMPLETENESS TO ASSURE PROPER SAFE USE AND DISPOSAL OF THESE MATERIALS.

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

Michael O. Leavitt
Governor
Dianne R. Nielson, Ph.D.
Executive Director
Russell A. Roberts
Director

150 North 1950 West
P.O. Box 144820
Salt Lake City, Utah 84114-4820
(801) 536-4000
(801) 536-4099 Fax
(801) 538-4414 T.D.D.

FILE COPY

December 22, 1994

DAQE-1093-94

Dwayne Hirst
Olympia Sales Company
1537 South 700 West
Salt Lake City, Utah 84104

Re: Questions Concerning Paint Operations

Dear Mr. Hirst:

The Division of Air Quality appreciates the information you have provided to us on your painting operation. In reviewing the information, we find that the following additional information is needed:

1. Are you converting to high volume low pressure paint guns?

2. Where are the paint and solvent barrels stored and how do you dispose of them?

3. What type of process is used to check for leaks?

4. What organic solvent is used to clean booths and guns?

5. Where is the cleaning of the guns done?

5. Are the painters trained in checking for leaks and in cleaning guns?

6. You referred to using 12 drums per month of 5238 Guardsman Blend, 392#/55. How much is contained in a drum?

7. Is this the solvent you use for cleaning guns and booths?

The DAQ is in the process of finalizing the Ozone Maintenance Plan. Since Olympia Sales is one of the major sources listed in the plan, an Approval Order revision needs to be completed quickly. In order to do this, answers to the above questions are needed as soon as possible.

Please submit the information to my attention. If you have any questions or concerns, please call me at (801) 536-4073.

Sincerely,

Carol Nielsen

Carol Nielsen, Engineering Technician
New Source Review Section
Division of Air Quality

4.2.5-52

End Feb.

CROWN CABINETS
By Olympia Sales Company

RECEIVED
JAN 10 1995
Air Qual

January 5, 1995

Carol Nielsen, Engineering Technician
New Source Review Section
Division of Air Quality
150 North 1950 West
Salt Lake City, Utah 84116

Dear Ms. Nielsen:

This letter is in response to your request for additional information dated December 22, 1994.

1- Enclosed please find information concerning paint guns that Olympia is converting to.

2- The full paint and solvent barrels are stored inside a room (which has a two hour fire rating) with sealed lids until we are ready to utilize the material inside. When the barrels are empty they are re-sealed with their lids and placed in an area for pick up by Beehive Barrel.

3- "Leak-check" in the paint system is done by visual inspection. All pumps, piping and hoses are exposed and very easy to see if they are leaking. How often

4- The paint booths are *scraped* off; no solvents are used. The guns are cleaned with T-6 solvent. (MSDS enclosed)

5- Normally only the gun tips are cleaned by soaking them in a small can (6 to 12 0z.) of T-6 solvent. When a gun needs more work done, it is taken off line and sent out for repairs or repaired in our maintenance room.

6- Each drum of Guardsman Blend contains 55 gals.

7- Guardsman Blend is used to mix the stain colors.

If you have any questions or need additional information, please feel free to call me.

Very truly yours,

Dwayne Hirst

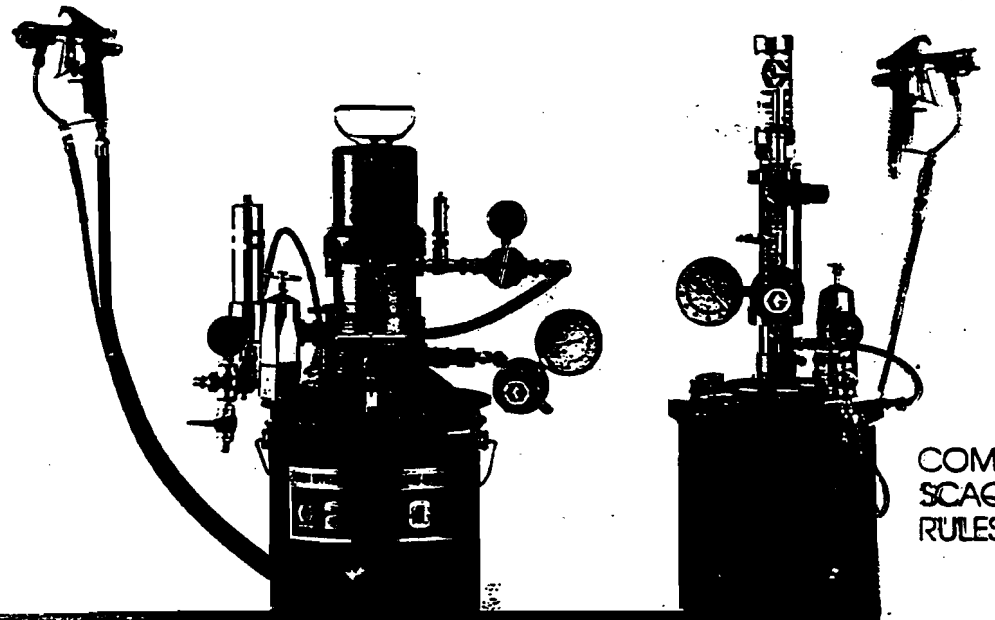
Dwayne Hirst
V.President, Operations

DH/sg
enc:

4.2.5-53

OLYMPIA SALES COMPANY • 1537 SOUTH 700 WEST • SALT LAKE CITY, UTAH 84104 • (801) 972-4050 • FAX (801) 972-1827

HIGH OUTPUT HVLP SPRAYERS



COMPLIES WITH SCAQMD* AIR QUALITY RULES 1124, 1136, 1151

4.2.5-54

H.E.L.P. 2000™ and H.E.L.P. 2500™ Air Assisted Airless Sprayers

OMPLIANCE

The H.E.L.P. 2000 and H.E.L.P. 2500 comply with SCAQMD Air Quality Rules 1124, 1136 and 1151.

EFFICIENCY

In an independently conducted test, the H.E.L.P. 2500 achieved 84% transfer efficiency, matching or surpassing the performance of other tested HVLP units.*

LONG LIFE

Low operating fluid pressures (0-1000 psi) and chromed stainless steel wear parts prolong the lives of the units.

PRODUCTIVITY

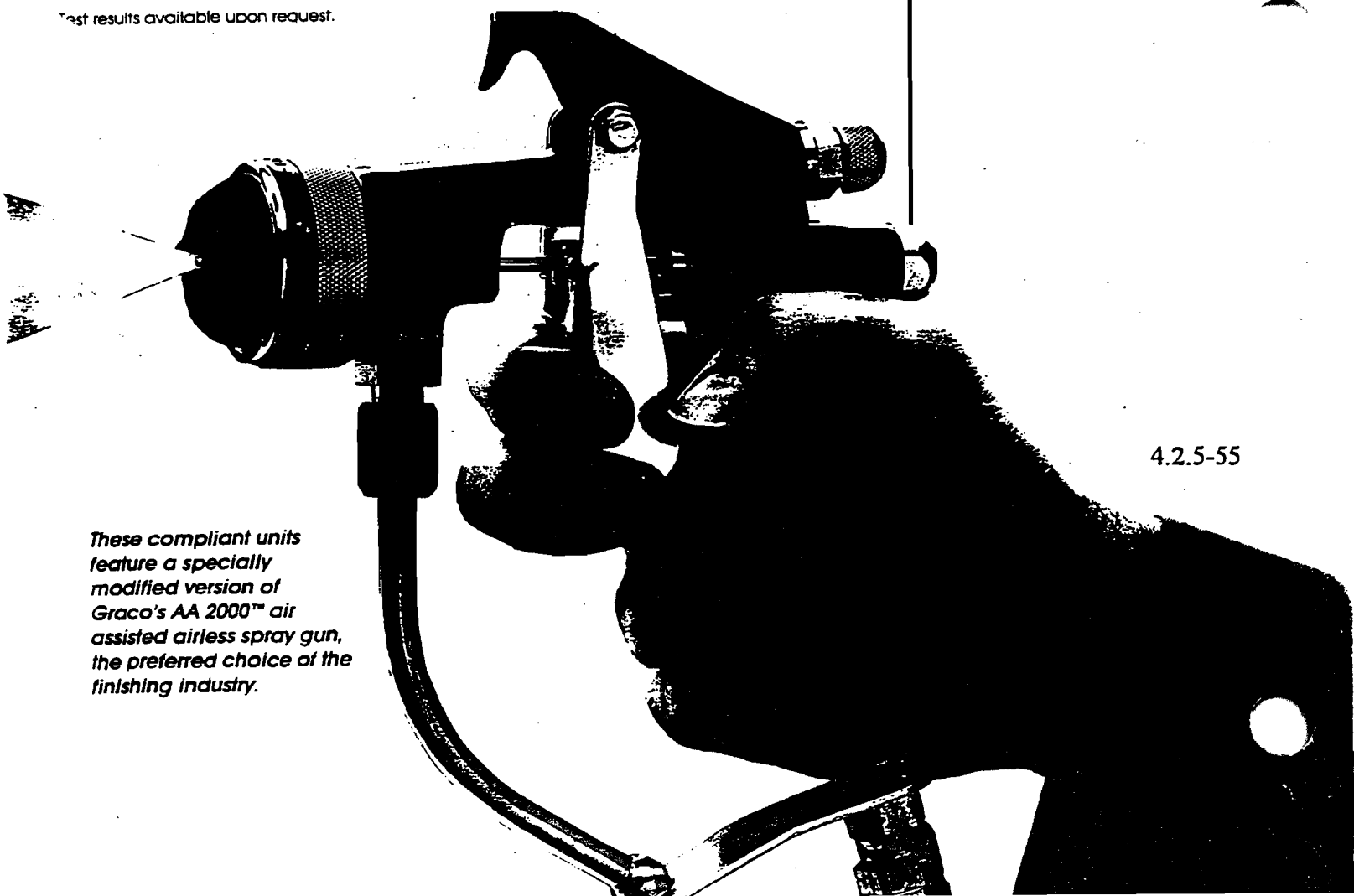
The H.E.L.P. 2000 and H.E.L.P. 2500 will yield production speeds equal to your present finishing system and will also reduce overspray, minimize spray booth maintenance and lessen related clean-up time.

ADAPTABILITY

High Efficiency Low Pressure conversion kits are available to upgrade your existing airless or AA 2000 equipped sprayer to full compliance.

OUR COMPLIANT SPRAYERS DELIVER . . .

*Test results available upon request.



4.2.5-55

These compliant units feature a specially modified version of Graco's AA 2000™ air assisted airless spray gun, the preferred choice of the finishing industry.

Graco's compliant air assisted airless sprayers are specially designed to operate at air pressures ranging from .1 to 10 psi. This meets the toughest air quality equipment standards, including SCAQMD Rules 1124, 1136 and 1151.*

Graco responds to the challenge of new air quality rules with compliant air assisted airless sprayers that meet new equipment regulations and deliver the high quality finish you demand.

Our new compliant air assisted ›ss sprayers operate at air ;ures ranging from .1 to 10 psi, fully complying with SCAQMD* Rules 1124, 1136 and 1151. The H.E.L.P. 2000 and H.E.L.P. 2500 offer the professional finisher the high transfer efficiency and production speed expected from air assisted airless spray at pressures that ensure full compliance.

So if you want to achieve fine finish quality and significant material savings at production line speeds, select one of Graco's fully compliant air assisted airless sprayers.

*South Coast Air Quality Management District

CHEMCENTRAL/SALT LAKE CITY DATE: 11/25/93

PRODUCT IDENTITY: 5350 T-6 SOLVENT PAGE 1

MATERIAL SAFETY DATA SHEET

THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)

IMPORTANT: Read this MSDS before handling & disposing of this product.

Pass this information on to employees, customers, & users of this product.

SECTION 1. 5350 T-6 SOLVENT IDENTIFICATION

PRODUCT IDENTITY: 5350 T-6 SOLVENT

NAME: CHEMCENTRAL/SALT LAKE CITY ADDRESS: P.O. BOX 27

CITY: WOODS CROSS, UT 84087 PHONE: 1-801-292-0437

CHEMTREC PHONE: 1-800-424-9300

SECTION 2. INGREDIENT & REGULATORY INFORMATION

All components of this product are on the TSCA list.

SARA Title III Section 313 Supplier Notification

This product contains the indicated toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 & of 40 CFR 372. This information must be included in all MSDSs that are copied and distributed for this material.

SARA TITLE III INGREDIENTS	CAS#	WT. % (REG. SECTION)	TPQ (LBS)
*Toluene	108-88-3	30 (311,312,313,RCRA)	1000
*Acetone	67-64-1	19 (311,312,313,RCRA)	5000
*Methanol	67-56-1	19 (311,312,313,RCRA)	5000
Light Aliphatic Solvent Naphtha	*64742-89-8	Not Appl. (311,312)	None
*Methyl Isobutyl Ketone	108-10-1	11 (311,312,313,RCRA)	5000
*Mixed Xylenes	1330-20-7	1 (311,312,313,RCRA)	None

SARA SECTION 311/312 HAZARDS: Acute Health, Fire

MATERIAL	CAS #	TWA + (OSHA)	TLV (ACGIH)
Toluene	108-88-3	50 ppm	50 ppm
Acetone	67-64-1	750 ppm	750 ppm
Methanol	67-56-1	200 ppm(S)	200 ppm(S)
Light Aliphatic Solvent Naphtha	*64742-89-8	300 ppm	300 ppm
Methyl Isobutyl Ketone	108-10-1	50 ppm	50 ppm
Mixed Xylenes	1330-20-7	100 ppm	100 ppm

MATERIAL	CAS #	CEILING	STEL (OSHA/ACGIH)
Acetone	67-64-1	None Known	1000 ppm
Methanol	67-56-1	None Known	250 ppm
Light Aliphatic Solvent Naphtha	*64742-89-8	None Known	750 ppm
Methyl Isobutyl Ketone	108-10-1	None Known	75 ppm
Mixed Xylenes	1330-20-7	None Known	150 ppm

MATERIAL	CAS #	LOWEST KNOWN LETHAL DOSE DATA
		LOWEST KNOWN LD50 (ORAL)
Methanol	67-56-1	1000.0 mg/kg(Man)
		LOWEST KNOWN LC50 (VAPORS)
Super VM&P	*64742-89-8	3400 ppm (Rats)
		LOWEST KNOWN LD50 (SKIN)
Toluene	108-88-3	4000.0 mg/kg (Rabbits)

HAZARDS: HEALTH (NFPA) 2 HEALTH (HMIS): 2 FLAMMABILITY: 3 REACTIVITY: 0

SECTION 2. INGREDIENTS & REGULATORY INFORMATION (CONT.)

CALIFORNIA PROPOSITION 65: This product contains the following chemicals known to the State of California to cause cancer & reproductive toxicity: Benzene, Toluene.

DOT SHIPPING NAME: Paint Related Material, 3, UN1263, PG-II

DRUM LABEL: (FLAMMABLE LIQUID)

SECTION 3. HAZARDS IDENTIFICATION

THRESHOLD LIMIT VALUE: 15 ppm (Evaporated Blend)

CONTAINS: TOLUENE, ACETONE, METHANOL, PETROLEUM NAPHTHA, METHYL ISOBUTYL KETONE, MIXED XYLENES

WARNING!

EXTREMELY FLAMMABLE!! VAPORS CAN CAUSE FLASH FIRE

POISON!!

ACUTE HAZARDS

EYE & SKIN CONTACT:

Primary irritation to skin, defatting, dermatitis. Absorption thru skin increases exposure.

Primary irritation to eyes, redness, tearing, blurred vision.

Liquid can cause eye irritation. Wash thoroughly after handling.

INHALATION:

Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression. Vapor harmful.

Breathing vapor can cause irritation.

Acute overexposure can cause damage to kidneys, blood, nerves, liver & lungs.

Repeated exposure over TLV can cause blindness.

SWALLOWING:

Can be fatal or cause blindness if swallowed. Cannot be made non-poisonous.

POISON ! Can cause irreversible nervous system damage & death..

Harmful or fatal if swallowed.

Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea.

SUBCHRONIC HAZARDS/CONDITIONS AGGREVATED

SUBCHRONIC HAZARDS

Absorption thru skin may be harmful. Studies with laboratory animals indicate this product can cause damage to fetus.

Chronic overexposure can cause damage to kidneys, blood, nerves, liver & lungs.

Persons with asthma, chronic respiratory problems, , severe heart, skin, liver or kidney problems should avoid use.

CHRONIC HAZARDS

CHRONIC HAZARD:

This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%.

This product may contain less than 1 ppm of Benzene.

Not considered hazardous in such low concentrations.

SECTION 4. FIRST AID MEASURES PROCEDURES

EYE CONTACT:
For eyes, immediately flush with plenty of water for 15 minutes & CALL A PHYSICIAN.

SKIN CONTACT:
In case of contact with skin immediately remove contaminated clothing. Wash thoroughly with soap & water. Wash contaminated clothing before reuse. (Discard contaminated shoes.)

INHALATION:
After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped give artificial respiration. CALL A PHYSICIAN immediately!

SWALLOWING:
Induce vomiting promptly using physician's instructions or by having patient stick finger down throat. After vomiting has been induced, give two teaspoonsful of baking soda in a glass of water. CALL A PHYSICIAN. Never give anything by mouth to an unconscious person. Have patient lie down & keep warm. Cover eyes to exclude light.

SECTION 5. FIRE FIGHTING MEASURES

LOWER FLAMMABLE LIMIT IN AIR (% by vol): 2.8
FLASH POINT (TEST METHOD): -16 C / 2 F (TCC) (Lowest Component)
FLAMMABILITY CLASSIFICATION: Class I B
EXTINGUISHING MEDIA
NFPA Class B extinguishers(Carbon Dioxide or foam)for Class I B liquid fires.
SPECIAL FIRE FIGHTING PROCEDURES
Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used.
Do not enter confined fire-space without full bunker gear.
(Helmet with face shield,bunker coats, gloves & rubber boots).
Use NIOSH approved positive-pressure self-contained breathing apparatus.
UNUSUAL EXPLOSION AND FIRE PROCEDURES
EXTREMELY FLAMMABLE!! VAPORS CAN CAUSE FLASH FIRE
Keep container tightly closed.
Isolate from oxidizers,heat,sparks, electric equipment & open flame.
Closed containers may explode if exposed to extreme heat.
Applying to hot surfaces requires special precautions.
Empty container very hazardous! Continue all label precautions!

SECTION 6. ACCIDENTAL RELEASE MEASURES.

SPILL OR LEAK PROCEDURES

Stop spill at source. Dike area & contain. Clean up remainder with absorbent materials. Mop up & dispose of. Persons without proper protection should be kept from area until cleaned up.

WASTE DISPOSAL METHOD

Recycle or dispose of observing local, state & Federal health, safety & pollution laws. If questions exist, contact the appropriate agencies.

OTHER PRECAUTIONS

Vapors may ignite explosively & spread long distances. Prevent vapor buildup. Put out pilot lights & turn off heaters, electric equipment & other ignition sources during use & until all vapors are gone.

SECTION 7. HANDLING AND STORAGE

HANDLING

Isolate from oxidizers, heat, sparks, electric equipment & open flame. Use only with adequate ventilation. Avoid breathing of vapor or spray mist. Avoid contact with skin & eyes.
Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.
Avoid free fall of liquid. Ground containers when transferring. Do not flame cut, saw, drill, braze, or weld. Empty container very hazardous! Continue all label precautions!

STORAGE

Vapors may ignite explosively & spread long distances. Prevent vapor buildup. Put out pilot lights & turn off heaters, electric equipment & other ignition sources during use & until all vapors are gone.
Do not store above 49 C/120 F. Store large amounts in structures made for OSHA Class I B liquids. Keep container tightly closed & upright when not in use to prevent leakage.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

EXPOSURE CONTROLS

Ventilate to keep vapors of this material below 60 ppm. If over TLV, in accordance with 29 CFR 1910.134, use NIOSH approved positive-pressure self-contained breathing apparatus. Consult Safety Equipment Supplier. Use explosion-proof equipment.

VENTILATION

LOCAL EXHAUST	: Necessary
MECHANICAL (GENERAL)	: Acceptable
SPECIAL	: None
OTHER	: None

PERSONAL PROTECTIONS:

Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.

SECTION 9. PHYSICAL DATA

APPEARANCE :	Liquid,Water-White
ODOR :	Ketone
BOILING RANGE :	56 97 143 C / 133 207 290 F
GRAVITY @ 60 F :	
API :	43.4
SPECIFIC GRAVITY (Water=1) :	0.809
POUNDS/GALLON :	6.739
VOCS (VAPOR PRESSURE SOLVENT LBS/SQ IN) (LBS/GAL)	6.739
TOTAL VOLATILE ORGANIC COMPOUNDS (TVOC) (g/L) :	809.0
NONEXEMPT VOLATILE ORGANIC COMPOUNDS (CVOC) (g/L) :	809.0
NONEXEMPT VOLATILE ORGANIC COMPOUNDS (CVOC) (Vol. %) :	100.0
VAPOR PRESSURE (mm of Hg) @ 20 C :	66.8
NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C) :	66.8
VAPOR DENSITY (Air=1) :	2.7
WATER ABSORPTION :	Appreciable
% VOLATILE BY VOL :	100.0
SOLVENCY PARAMETERS:	
HKB (Hydrogen Bonding) :	28.6
PKB (Polarity) :	37.2
DKB (Dispersion) :	34.2
REFRACTIVE INDEX :	1.408
MIXED ANILINE POINT (Acid Insol):	29 C / 85 F

SECTION 10. REACTIVITY DATA

STABILITY
Stable

CONDITIONS TO AVOID
Isolate from oxidizers,heat,sparks, electric equipment & open flame.

MATERIALS TO AVOID
Isolate from strong oxidizers such as permanganates,chromates & peroxides.

HAZARDOUS DECOMPOSITION PRODUCTS
Carbon Monoxide, Carbon Dioxide from burning.

HAZARDOUS POLYMERIZATION
Will not occur.

NOTICE

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications.
All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency.
Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein.
This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

RECEIVED
MAR 07 1995
Air Quality

FAX

TO: Jon L. Black

TO. D.A.Q.

FROM: Dwayne Hirst

DATE: March 7, 1995

NUMBER OF PAGES: 2

PHONE: 972-4050

FAX:

REMARKS:

CROWN CABINETS

OLYMPIA SALES COMPANY
1537 SOUTH 700 WEST
SALT LAKE CITY, UTAH 84104
PHONE: 800-972-4051
FAX: 801-972-1827

4.2.5-62

UTAH DIVISION OF AIR QUALITY
NEW/MODIFIED SOURCE PLAN REVIEW

Dwayne Hirst
Olympia Sales company
1537 South 700 West
Salt Lake City, Utah 84104

RE:	Modification of Approval Order to Meet Standards of the Ozone Maintenance Plan Salt Lake County, CDS A1, NA; TOXICS MAJOR, TITLE V MAJOR
ENGINEER:	Jon L. Black, Engineering Technician
DATE:	February 24, 1995
NOTICE OF INTENT DATED:	February 24, 1995
PLANT CONTACT:	Dwayne Hirst
PHONE NUMBER: FAX NUMBER	(801) 972-4050 (801) 972-1827
PLANT LOCATION:	1537 South 700 West, Salt Lake City, Utah
UTM COORDINATES:	4,509,700 m. Northing; 422,900 m. Easting

FEES:

Basic Approval Order Fee	$000.00
Review Engineer - 0 total hours at $50.00/hour	$000.00
Modeler - 0 hours at $50.00/hour	$000.00
Notice To Paper	$80.00
Travel - 00 miles at $0.23/mile	$000.00
TOTAL	$80.00

APPROVALS:

Review Engineer JLB 3/6/95
(Signature & Date)

We request that you read the proposed Approval Order conditions; if you do not understand or do not agree with the contents of the conditions, please contact the review engineer within five days. However, when you understand the attached proposed/draft Approval Order conditions, please sign below and return. Thank You.

Applicant Contact Dwayne Hirst 3-7-95
(Signature & Date)

F:\AQ\ENGINEER\JBLACK\WP\REVIEWS\OLYMPIA.RVW

1- Monthy inspection of Paint systems

Once each month all pumps, Piping, hoses and guns will be Visually inspected for Leakage. a check List will be posted on the pump room wall noteing The Last inspection, who made The inspection and if any Thing was Leaking. There will also be a place To put The date when The Leak was fixed.

2- Olympia has 4 Paint material That The Graco H.E.L.P. guns are used apply. There are Two more Stain Colors That conventional air spray gun are used. The conventional guns will be replaced by The Graco H.E.L.P Guns by Nov. 15 19[illegible].