

75-079-0121

Dynamic
8/12/84
0920802(1)
RECEIVED
P.O. BOX 200
Houston, TX 77282

INST 07/14/84

Gulf Oil Products Company

SAFETY, HEALTH & ENVIRONMENT
REGULATORY COORDINATION

July 2, 1984

L. B. Arnold
GENERAL MANAGER

Mr. Martin Greif
TSCA Interagency Testing Committee
401 M Street, SW
Washington, D.C. 20460



contains No CBI

Dear Mr. Greif: 6494000274

Gulf Oil Products Company appreciates the opportunity to provide information to the Interagency Testing Committee (ITC). We understand the Committee is studying cumene to determine if a testing recommendation should be made.

As indicated in the Committee's information review on cumene, Gulf Oil Products is a major producer of cumene at its Port Arthur and Philadelphia Refineries. The cumene produced by Gulf is sold as a commodity chemical to major industrial consumers. Most of the cumene sold by Gulf is used by our customers to produce phenol. In both Gulf refineries the cumene unit is a closed system which is an integral part of the facility. Streams leaving the unit go back into the refinery processes. There are no waste streams from the cumene unit itself, except the spent catalyst.

There are 4-5 people needed to work each cumene unit. We have found through industrial hygiene surveys that employee exposures to cumene are extremely low. A table summarizing Gulf's employees' cumene exposure is attached.

We have one problem with the working draft of the Information Review. There is not enough information available to assess the validity of the study mentioned under Teratogenicity, Embryotoxicity and Fetotoxicity on page 18 (Serebrennikov and Ogleznez, 1978). It is not scientifically valid to speak of teratogenicity, embryotoxicity and fetotoxicity when the maternal effects are unknown. Also, a 4-month study is not a typical teratogenicity study. For these reasons, we feel this study should not be given the same weight as the other information in this review. If included at all, this study should be referred to as an unsubstantiated report.

The above study is the only support for the following statement found on page iv of the overview: "Embryotoxic and teratogenic effects were observed in rats following inhalation exposure." Consequently, we feel that this statement should be removed from the report.

Enclosed with this letter is a copy of Gulf's Material Safety Data Sheet for cumene. Gulf does not publish a technical bulletin for cumene.

We hope this information proves helpful to you. If you have any questions on the information provided, please do not hesitate to call me.

Yours truly,

J. F. Dey
J. F. Dey

(713) 754-2000



JFD/lvi
Attachment

A DIVISION OF GULF OIL CORPORATION

GULF TOWER
1301 MCRAWNEY

EYE PROTECTION (USE MOST APPROPRIATE):
Chemical goggles; Face shield

SKIN PROTECTION: Polyvinyl alcohol, Butyl rubber, Polyethylene Gloves.
Impervious garments.

RESPIRATORY PROTECTION: Not normally required. Chemical cartridge respirator or supplied-air respiratory equipment for concentrations exceeding the occupational exposure limit. Special applications may necessitate the use of more stringent respiratory protection equipment.

VENTILATION: Use general ventilation. Local exhaust, in addition to general ventilation is recommended when exposure limit is exceeded. Special applications may necessitate the use of more stringent ventilation.

HANDLING:

Follow all personal protection procedures while handling. Remove contaminated clothing. Use only in a well-ventilated area. Avoid all personal contact. Ground all containers.

STORAGE:

Follow methods advocated for the safe handling and storage of flammable or combustible hydrocarbons. Store in a cool, well-ventilated area away from possible sources of ignition. Keep containers closed when material is not in use. Protect against physical damage.

OTHER:

Clean empty containers properly and thoroughly before discarding or reuse.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED (IN ADDITION SEE SECTION VIII):
Stop flow. Eliminate all sources of ignition, flammables. Avoid inhalation (excessive). Avoid dermal contact. Absorb or scrape up. Ventilate area. Remove soiled clothing.

WASTE DISPOSAL - USE APPROPRIATE METHOD(S):

Incinerate under controlled conditions in an approved incinerator. Do not allow material to drain into sewers/water supplies.

In all cases, follow facility emergency response procedures. Contact Facility Environmental Manager for assistance. Report any discharge of oil or hazardous substances that may enter surface waters to the National Response Center (800-424-8802).

Observe all applicable local, state, and federal environmental spill and water quality regulations.

PRODUCT/MATERIAL: Camene, Gulf

Page 4

BOILING POINT: 152 C (305 F)
OVERPOINT: NA
MELTING POINT: -96 C (-141 F)
VAPOR PRESSURE: 8 mm at 20 C
VAPOR DENSITY (AIR=1): 4.1
SOLUBILITY IN WATER: Insoluble

SPECIFIC GRAVITY: 0.866
EVOLATILE BY VOL: 100
EVAPORATION RATE (ETHER=1): 13.9
VISCOSITY: <32.6 SUVs
POUR POINT: NA

APPEARANCE/ODOR:

Colorless liquid with a sharp penetrating odor. Odor may not be sufficient warning of toxicity.

Observe good hygiene and safety precautions when handling this product.

REVISION DATE: 9/83
EXPIRATION DATE: 9/86
PREPARED BY: D.K.Susa

CODE NUMBER: 10PET0038SEP8301
REPLACES SHEET: NA
BOOK NUMBER: B11240

NOTICE: The data and recommendations presented herein are based upon data which is considered to be accurate. However, Gulf makes no guarantee or warranty, either expressed or implied, of the accuracy or completeness of these data and recommendations.

MEDICAL & HEALTH RESOURCES DIVISION
TOXICOLOGY DEPARTMENT
P.O. BOX 3240
PITTSBURGH, PA 15230

0005

GULF'S CUMENE EXPOSURE DATA

Facility	Total Number of Personal Samples	Range of Cumene Exposure Concentration	Average Cumene Exposure Concentration
Philadelphia Refinery	140	BDL* - 10 ppm	0.08 ppm
Port Arthur Refinery	500	BDL - 2.4 ppm	0.05 ppm
GOTCO Ships	130	BDL - 20 ppm	0.08 ppm

*BDL = Below Detection Limit
Gulf Exposure Limit for Cumene = 50 ppm
All personal samples are T.W.A. for entire shift (8 hr or 12 hr)

MATERIAL SAFETY DATA SHEET

GULF OIL CORPORATION



PRODUCT/MATERIAL: Cumene, Gulf
MANUFACTURER: Gulf Oil Products Company
ADDRESS: P.O. Box 2001, Houston, TX 77252

TRADE NAME: Gulf Cumene

SYNONYM: Cumol, isopropylbenzene, 2-phenylpropane
CHEMICAL FAMILY: Aromatic hydrocarbon

FORMULA: C₉H₁₀ (CH₃)₂
CAS NUMBER: 98-02-8
UN/NA NUMBER: UN 1993
DOT HAZARD CLASS: Flammable liquid

WARNING
FLAMMABLE

EMERGENCY PHONE: (713) 651-0693
CHEMTREC ASSIST: (800) 424-9300

EYE:

May cause mild to moderate irritation.

SKIN:

Repeated and/or prolonged contact may cause irritation and/or dermatitis.

INHALATION:

Prolonged or repeated breathing of vapors may cause irritation of the respiratory tract.
Inhalation of high concentrations will cause CNS depression (nausea, drowsiness, incoordination, headache, dizziness).

INGESTION:

Aspiration of material into the lungs can cause chemical pneumonia.
May cause gastrointestinal (GI) disturbances such as nausea, vomiting, and diarrhea.

EYE CONTACT:

Flush with large amounts of water.
Seek medical aid.

SKIN CONTACT:

Wash skin with soap and water.
If irritation persists, seek medical aid.
If systemic effects occur, seek medical aid.

INHALATION:

Remove from exposure. If breathing has stopped or is difficult, administer artificial respiration or oxygen as indicated. Seek medical aid.

INGESTION:

DO NOT INDUCE VOMITING/POSSIBLE ASPIRATION HAZARD.
Immediately seek medical aid.

PRODUCT/MATERIAL: Cumene, Gulf

Page 2

EXPOSURE LIMIT (PRODUCT): ACGIH-TLV 50 ppm * 245 mg/m3 *

*Possible skin absorption

CONDITIONS CONTRIBUTING TO INSTABILITY: All source of heat and ignition.

INCOMPATIBILITY:
May react with oxidizing agents.

HAZARDOUS REACTION/DECOMPOSITION PRODUCTS:
Irritating and/or toxic fumes and gases may be emitted upon decomposition.

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION:
Not applicable

FLASH POINT & METHOD: 36 C (97 F) P-M **AUTOIGNITION TEMP.:** 425C (797F)

FLAMMABLE LIMITS (% BY VOLUME/AIR): LOWER: 0.9 UPPER: 6.5

EXTINGUISHING MEDIA:
Dry chemical (preferred), foam, water

FIRE-FIGHTING PROCEDURES:
Wear self-contained breathing apparatus.
Water may be an ineffective extinguishing medium.
Fight horizontal tank fires from the sides of the tank.
Use water to cool fire-exposed containers, structures, and to protect personnel.

FIRE AND EXPLOSION HAZARDS:
Vapors may form explosive mixtures with air.
Fire and explosion hazards are moderate when exposed to heat or flame.
EMPTY CONTAINERS may retain product residue including flammable or explosive vapors. Do not cut, drill, grind or weld near full, partially full or empty product containers.
Vapors are heavier than air and may travel along the ground to some distant source of ignition and flash back.

0 0 0 8