

**DATA SHEET FOR TOXICITY STUDIES**

THIS SHEET WILL BE PHOTOCOPIED; PLEASE TYPE ALL INFORMATION.

**FYI-0794-001234**

TO: DIRECTOR OF TOXICOLOGY  
CENTRAL MEDICAL DEPARTMENT  
AMERICAN CYANAMID COMPANY  
WAYNE, NEW JERSEY 07470

PREPARED BY

**A.G. Williams**

DATE PREPARED

**11/15/77**

DIVISION

**ICD**

DEPARTMENT

**Water Treating & Mining Chem.**

CUR SAMPLE NO.

**1. IDENTIFICATION OF PRODUCT**

1.1 SALES NAME (GIVE PRODUCT CODE NUMBER, IF ANY)

**MAGNIFLOC 1561C**

1.2 CHEMICAL NAME (IF THIS PRODUCT IS A DYE OR PIGMENT, GIVE COLOR INDEX NAME AND NUMBER, IF ANY)

**emulsion acrylamide-dimethylaminoethylmethacrylate copolymer Me<sub>2</sub>SO<sub>4</sub>**

1.3 AMOUNT OF SAMPLE SUPPLIED (WEIGHT OR VOLUME)

**1 quart**

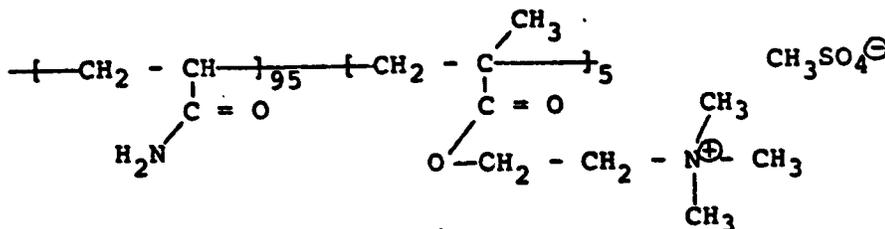
1.4 YOUR SAMPLE NO.

**SPS #12460**

**2. STRUCTURAL FORMULA AND COMPOSITION**

INCLUDE IMPURITIES IN STATEMENT OF COMPOSITION. FOR MIXTURES, GIVE PERCENTAGE COMPOSITION AND STRUCTURAL FORMULAS OF PRINCIPAL COMPONENTS. FOR SOLUTIONS, GIVE PERCENTAGE SOLIDS AND COMPOSITION OF SOLVENT AND SOLIDS, SEPARATELY, EACH ON BASIS OF 100. FOR RESINS, IDENTIFY THE MONOMERS, AND GIVE STRUCTURE OF REPEATING UNIT. GIVE PROPORTION OF MONOMERS IN COPOLYMERS, WHERE APPLICABLE. GIVE PERCENTAGE OF RESIDUAL INTERMEDIATES OR STARTING MATERIALS, AND UNNEUTRALIZED ACID OR ALKALI. DO NOT USE SALES NAMES OF OTHER MANUFACTURERS WITHOUT IDENTIFYING THE MATERIALS BY CHEMICAL NAME.

- 28% acrylamide-dimethylaminoethylmethacrylate Me<sub>2</sub>SO<sub>4</sub> copolymer
- 42% water
- 25% odorless paraffin solvent
- 2% sorbitan monooleate
- 3% ethylene oxide linear alcohol adduct



FYI-94-001234  
INIT 07/26/94



84940000293

IMPORTANT: PLEASE BE SURE TO ENTER YOUR SAMPLE IDENTIFICATION NUMBER IN 1.4 ABOVE. TOXICITY TESTS ARE SOMETIMES INFLUENCED GREATLY BY IMPURITIES IN A SAMPLE. IT IS NOT UNUSUAL FOR A NEED TO ARISE TO GO BACK, OVER A LONG PERIOD OF TIME, TO DETERMINE THE EXACT COMPOSITION OR ORIGIN OF THE SAMPLE THAT WAS USED.

**3. PHYSICAL PROPERTIES**

3.1 APPEARANCE: DESCRIBE AS POWDER, CRYSTAL, FLAKE, GRANULE, LUMP, PASTE, VOLATILE SOLID, VISCOUS LIQUID, MORILE LIQUID, VOLATILE LIQUID, COMPRESSED GAS, SELF-PRESSURIZED CONTAINER, ETC. WHERE APPLICABLE, GIVE APPROXIMATE MESH SIZES OF SOLIDS.

**white opaque emulsion (w/o)**

3.2 MELTING POINT

**-15°C**

3.3 BOILING POINT

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3.4 VAPOR PRESSURE (SPECIFY AMBIENT TEMPERATURE) AND PRESSURE.

**like paraffin oil**

3.5 FLASH POINT, DEGREES FAHRENHEIT, TAG OPEN CUP

**> 200°F**

3.6 SOLUBILITY IN WATER

**typical < 2%**

**4. PAYMENT OF CHARGES**

WORK ON THIS SAMPLE WILL BE PERFORMED BY AN INDEPENDENT CONTRACTOR WHO WILL SUBMIT A BILL TO THE CENTRAL MEDICAL DEPARTMENT. PLEASE INDICATE BELOW THE OFFICE OR INDIVIDUAL TO WHOM THE BILL SHOULD BE REFERRED FOR PAYMENT. INCLUDE ANY CHARGE NUMBERS THAT ARE APPLICABLE.

RECEIVED  
 OFFICE OF  
 9/4 JUL 26 PM 3:55

18411-68



Will Perry #131084(1)  
CBI # 208480205-1

American Cyanamid Company  
One Cyanamid Plaza  
Wayne, NJ 07470

March 7, 1984

Mr. Martin Greif  
Executive Secretary  
TSCA Interagency Testing Committee  
Environmental Protection Agency (TS-792)  
401 M Street, SW  
Washington, DC 20460

Reference: (1) Federal Register Vol. 48, No. 218, November 9, 1983  
Page 51519  
(2) Letter Martin Greif to A. E. Sherr Dated November 18, 1983

Dear Mr. Greif:

In response to your letter of November 18, 1983, (Ref. 2) and the Federal Register Notice (Ref. 2), we are submitting information on chemicals we currently manufacture or have previously manufactured.

Chemicals No Longer Manufactured by American Cyanamid Company

To the best of my knowledge, after checking with various Cyanamid manufacturing locations and the specific facilities reporting for the TSCA Inventory, American Cyanamid no longer manufactures the following chemicals nor has an Inventory of them:

<u>Chemical</u>	<u>Case No.</u>	
Anthraquinone	84-65-1	IR-408
N-t-Butyl-2-benzo- thiazolesulfenamide	95-31-8	IR-414A
N-Cyclohexyl-2- benzothiazolesulfenamide	95-33-0	IR-414B
Thiocarbanilide	102-08-9	IR-421
Diphenylamine	122-39-4	IR-433A
2,6-Di-tert-butylphenol	128-39-2	IR-412B

Ethansaminium, N,N,N-Trimethyl -2-[(2-methyl-1-oxo-2-propenyl)oxy]-,  
methyl sulfate, polymer with 2-propenamide (CAS 26006-22-4)

Enclosed is MSDS No. 1216-05 which describes a water in oil emulsion containing this polymer.

Our Toxicity Reports 78-78 and 82-11 present data on the fish toxicity of the water in oil emulsion. Report 82-11 compares the use of static conditions to river water for both bluegill and trout. The emulsion had considerably higher LC<sub>50</sub> values for river water vs. static conditions, i.e. LC<sub>50</sub> of 60 mg/l vs 7.7 mg/l for rainbow trout and 46 mg/l vs. 2.1 mg/l for the bluegill.

The polymer emulsion had an oral LD<sub>50</sub> for albino rats of 10 mg/kg (Toxicity Report 78-43). Toxicity Report 82-86 describes results of a primary dermal irritation test (open skin patch) on rabbits for the emulsion. It was concluded that the emulsion was mildly irritating to the skin of rabbits.

SUMMARY

We trust the enclosed information will provide sufficient data to conclude the exposures to the chemicals are very limited and that there is sufficient data so that additional testing is not warranted at the present.

Sincerely,



Allan S. Sherr, Ph.D.  
Manager Chemical Petitions and  
Regulatory Affairs  
Toxicology and Product Safety Dept.

AES:sa  
06/5659g



# MATERIAL SAFETY DATA

MSDS NO. 1216-05  
CAS NO. ....  
DATE: 01/17/83

## PRODUCT IDENTIFICATION

TRADEMARK: **MAGNIFLOC<sup>®</sup> 1561C Flocculant**  
SYNONYMS: Cationic polyacrylamide in water-in-oil emulsion  
CHEMICAL FAMILY: Cationic polyacrylamide copolymer  
MOLECULAR FORMULA: Mixture  
MOLECULAR WGT.: Mixture

## WARNING

CAUSES SKIN BURNS  
HARMFUL IF INHALED  
MAY CAUSE EYE IRRITATION  
SPILLS OF THIS PRODUCT ARE VERY SLIPPERY

## HAZARDOUS INGREDIENTS

COMPONENT	CAS. NO.	%	TWA/CEILING	REFERENCE
Petroleum distillate	006002-05-9	25	500 ppm	OSHA

## NFPA HAZARD RATING

Not Established

## HEALTH HAZARD INFORMATION

### EFFECTS OF OVEREXPOSURE:

The acute oral (rat) and acute dermal (rabbit) LD50 values are > 10 ml/kg. Minimal eye irritation was produced during testing in rabbits. When this product was tested for skin irritation in rabbits under occlusive condition, as would occur if the product was spilled into boots, irreversible skin damage was produced. However when this product was tested under open conditions as would occur if the product was spilled on clothing, only mild skin irritation was produced after 24 hours of contact. Aspiration of the solvent, petroleum distillate, may cause chemical pneumonitis. Overexposure to vapor of petroleum distillate may cause dizziness, drowsiness, headache, nausea and eye or respiratory tract irritation.

### FIRST AID:

If MAGNIFLOC 1561C Flocculant is swallowed, do not induce vomiting. Give several glasses of milk or water. Administer a saline cathartic. In case of skin contact, remove contaminated clothing without delay. Wear impervious gloves. Cleanse skin thoroughly with soap and water. Do not omit cleaning hair or under fingernails if contaminated. Do not reuse clothing without laundering. Do not reuse contaminated leatherware. In case of eye contact, immediately irrigate with plenty of water for 15 minutes. Refer to a physician if irritation persists. If vapor of MAGNIFLOC 1561C Flocculant is inhaled, remove from exposure. Administer oxygen if there is difficulty in breathing.

EMERGENCY PHONE: 201/835-3100

AMERICAN CYANAMID COMPANY, WAYNE, NEW JERSEY 07470

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**EXPOSURE  
CONTROL METHODS**

Where a closed system is not used, good enclosure and local exhaust ventilation should be provided to minimize exposure. Where concentrations are below the PEL, no respiratory protection is required. For spills or leaks, such protection may be necessary. Where exposures exceed PEL, use respirator approved by NIOSH for the material and level of exposure. See "GUIDE TO INDUSTRIAL RESPIRATORY PROTECTION" (NIOSH). Material causes eye and skin irritation on contact. A full facepiece respirator will provide eye and face protection. Wear the following as necessary to prevent skin contact; work pants, long sleeve work shirt, impervious gloves and impervious apron. For operations where eye or face contact can occur; wear respiratory protection outlined above, (full facepiece) or chemical splash proof goggles. Provide eyewash fountain and safety shower in close proximity to points of potential exposure.

**FIRE AND  
EXPLOSION  
HAZARD  
INFORMATION**

FLASH POINT:	> 200 F ( > 93.3 C)
METHOD:	Pensky-Martens
FLAMMABLE LIMITS (% BY VOL):	Not Available
AUTOIGNITION TEMP:	Not Available
DECOMPOSITION TEMP:	Not Available
FIRE FIGHTING:	Use alcohol foam, carbon dioxide or dry chemical to extinguish fires. Water may be ineffective. Wear self-contained, positive pressure breathing apparatus and full firefighting protective clothing. See Exposure Control Methods for special protective clothing. Use water to keep containers cool.

**REACTIVITY DATA**

STABILITY:	Stable
CONDITIONS TO AVOID:	None known
POLYMERIZATION:	Will Not Occur
CONDITIONS TO AVOID:	None known
INCOMPATIBLE MATERIALS:	Strong oxidizing agents. This material reacts slowly with iron, copper and aluminum, resulting in corrosion and product degradation.
HAZARDOUS DECOMPOSITION PRODUCTS:	Thermal decomposition or combustion may produce carbon monoxide, carbon dioxide, ammonia and/or oxides of nitrogen.

**PHYSICAL  
PROPERTIES**

APPEARANCE AND ODOR:	White, viscous, opaque liquid; slight hydrocarbon odor
BOILING POINT:	Water phase boils at $\approx$ 212 F ( $\approx$ 100 C). Initial boiling point for oil phase is $\approx$ 347 F ( $\approx$ 175 C).
MELTING POINT:	0 F (-18 C)
VAPOR PRESSURE:	Not Available
SPECIFIC GRAVITY:	1.0
VAPOR DENSITY:	Not Available
% VOLATILE (BY VOL):	$\approx$ 65-70
OCTANOL/H <sub>2</sub> O PARTITION COEF.:	Not Available
pH:	$\approx$ 4-5 (diluted with water)
SATURATION IN AIR (BY VOL):	Not Available
EVAPORATION RATE:	< 1 (Butyl Acetate = 1)
SOLUBILITY IN WATER:	Appreciable