

MATERIAL SAFETY DATA SHEET
U.S. and Canada

IDENTIFICATION SECTION

PRODUCT NAME: Disperplast-I

HMIS: 2*10 B
WHMIS: D2A,D2B

MANUFACTURER: BYK-Chemie USA Inc.
524 South Cherry Street, Wallingford, CT 06492

CHEMICAL FAMILY: Partial amide of a higher molecular weight unsaturated polycarboxylic acid
USE: Plastic additive

NJ TSRN:800963-5071

PREPARATION INFORMATION

PREPARED BY: Joanne Nole, Safety and Training Specialist

TELEPHONE: 203-265-2086

REVISION DATE: 01/01/2004

For regulatory information, see the product's Regulatory Information Data Sheet (RIDS). Web site: www.byk-chemie.com (download MSDS)

HAZARDOUS INGREDIENTS

| CAS NUMBER | % (Wt) | CHEMICAL NAME | TLV (ACGIH) [ppm] | STEL (ACGIH) [ppm] | PEL (OSHA) [ppm] | CARCIN- OGEN | LD50 (oral, rat) [mg/kg] |
|------------|--------|--|----------------------|-----------------------|---------------------|-----------------|-----------------------------|
| 68515-49-1 | 50 | 1,2-Benzenedicarboxylic acid branch alkyl esters | (5) mg/cu m | - | - | no | - |
| 9038-95-3 | 3 | Oxirane, Me, polymer with oxirane monobutyl ether (polyalkylene glycol) | - | - | - | no | 5370 |

() = recommended by supplier (TWA)

NON-HAZARDOUS INGREDIENTS

Information concerning non-hazardous ingredients is considered a Trade Secret

PHYSICAL DATA

| | | | |
|--------------------------|----------------------------|--------------------------------|---------------|
| BOILING RANGE (Solv.): | Not available | SPECIFIC GRAVITY (H2O=1): | 0.97 (20°C) |
| FREEZING POINT: | Not available | EVAPORATION RATE: | Not available |
| VAPOR DENSITY (AIR=1): | > 1 | SOLUBILITY IN WATER: | Insoluble |
| VAPOR PRESSURE (@ 20 C): | < 1 mm Hg (estimated) | PH VALUE: | Not available |
| APPEARANCE: | Light brown viscous liquid | WATER/OIL DISTRIBUTION COEFF.: | Not available |
| ODOR: | Odorless | ODOR THRESHOLD: | Not available |

FIRE AND EXPLOSION DATA

| | | | |
|-----------------------------------|---|----------------------------------|--|
| FLASH POINT: | > 392°F (> 200°C) Pensky-Martens (cc) | FLAMMABLE LIMITS (% Vol in air): | LEL= Not available UEL= Not available |
| AUTO IGNITION TEMPERATURE: | Not available | | |
| EXTINGUISHING MEDIA: | Foam, carbon dioxide, or dry chemical | | |
| HAZARDOUS COMBUSTION PRODUCTS: | Carbon mono/dioxide, nitrous oxides, phosphorous oxides, silicon compounds, formaldehyde | | |
| SPECIAL FIRE FIGHTING PROCEDURES: | Wear full body protective clothing and self-contained breathing apparatus. Water spray may be used to keep fire exposed containers cool. | | |
| FIRE AND EXPLOSION HAZARDS: | Keep away from heat and flames. Will not explode upon mechanical impact. | | |

REACTIVITY DATA

| | | | |
|-----------------------------|---------------------------------------|----------------------|------------|
| STABILITY: | Stable; polymerization will not occur | CONDITIONS TO AVOID: | None known |
| INCOMPATIBILITY: | Strong oxidizing agents | | |
| HAZARDOUS DECOMP. PRODUCTS: | None expected | | |

HEALTH HAZARD DATA

TOXICOLOGICAL DATA: LD50 (oral, rat) = > 5000 mg/kg (product)
Skin irritation (rabbit): Irritant (product) Eye irritation (rabbit): Non-irritant (product)
Polyalkylene glycol: LD50 (dermal, rabbit): >20800 mg/kg
Carcinogenicity, reproductive toxicity, teratogenicity, mutagenicity and sensitization of the product : Not Available
EXPOSURE LIMITS: Refer to Hazardous Ingredients Section

EFFECTS OF EXPOSURE:

Acute: Inhalation: High concentrations of vapors resulting from the product being heated, misted or sprayed may cause irritation of the respiratory tract, mucous membranes, and CNS depression.
Eye: Contact may cause irritation.
Skin: Contact will probably cause irritation.
Ingestion: Ingestion may irritate the digestive tract.
Chronic: Absorption of similar phthalates by inhalation and/or repeated skin contact has caused damage to the liver and blood of laboratory animals. High dosages have also shown adverse reproductive effects in laboratory animals.
Prolonged exposure to respirable aerosols (mists) of polyalkylene glycol has caused lung damage in rats (90 days; 0.3 mg/m3).

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: May be aggravating to some skin and asthma-type conditions, and to pre-existing liver disorders.

ROUTES OF ENTRY: Inhalation: possible Eye: possible
Skin: Contact-possible; Absorption-possible Ingestion: not likely

FIRST AID MEASURES

Inhalation: Remove to fresh air. Administer artificial respiration if necessary. Get medical aid as soon as possible.
Eye: Immediately flush with plenty of water for at least 20 minutes. Get medical aid.
Skin: Remove contaminated clothing. Wash thoroughly with soap and water.
Ingestion: Do not induce vomiting. Dilute with 1-2 glasses of water. Get medical aid.
Never give anything by mouth to an unconscious person.

PREVENTIVE MEASURES

PERSONAL AND SPECIAL PROTECTION INFORMATION:

RESPIRATORY: Unless air monitoring demonstrates dusts/mists/vapors are below the recommended exposure levels and/or WEEL, wear a properly fitted respirator (NIOSH) or dust mask during exposure.
VENTILATION: Local exhaust recommended.
EYE PROTECTION: Safety glasses; goggles recommended
GLOVES: Neoprene rubber recommended
OTHER EQUIPMENT: Clean long legged, long sleeved work clothes.
WORK PRACTICES: Use in accordance with good industrial hygiene and safety practices.

SPILL OR LEAK PROCEDURES:

Eliminate all sources of ignition. Wear protective equipment: safety glasses, gloves and an appropriate respirator if in a confined area. Stop leak. Dike and contain spill. Pump into salvage tanks and/or absorb with suitable material.

WASTE DISPOSAL:

U.S.A.: Dispose of in accordance with applicable local, state and federal regulations.
Canada: Dispose of in accordance with applicable municipal, provincial and federal regulations.

STORAGE AND HANDLING PRECAUTIONS:

HARMFUL if absorbed through skin. Avoid skin and eye contact. Avoid breathing mists or vapors from heated products.
Handle as an industrial chemical. Keep container tightly closed when not in use. Keep away from strong oxidizing materials.

* * * * * END OF MSDS * * * * *

REGULATORY INFORMATION DATA SHEET (RIDS)

| | |
|---|--|
| Product Name: Disperplast-I | HMIS: 2*10 B |
| Manufacturer: BYK-Chemie USA Inc. P.O. Box 5670, 524 South Cherry Street Wallingford, CT USA 06492-7651 | NFPA Class: III B Flash Point: > 392°F Pinsky-Martens (cc) Revision Date: 07/01/2003 Supersedes: 07/01/2000 |
| Prepared By: Megan McCutcheon, EHS Manager | Telephone: 203-265-2086 / www.byk-chemie.com |
| Contacts: Regulatory Info: EHS Secretary - ext 3027 | Documents: Customer Svc. - ext 3057 or 3006 |

United States Federal Laws

EPCRA -- EMERGENCY PLANNING COMMUNITY RIGHT-TO-KNOW
[also known as Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)]

Section 302/304 Extremely Hazardous Substances/Release Reporting: Not applicable

Section 311 Hazard Category (e.g., Acute, Chronic, Fire, Reactive, Pressure): Acute, Chronic

Section 313 Toxic Chemical -- Supplier Notification:

This product does not contain any EPCRA 313 toxic chemicals in excess of the applicable de minimis concentration.

TSCA - TOXIC SUBSTANCES CONTROL ACT

TSCA Inventory: BYK-Chemie USA Inc. certifies that all of the components of this product are either listed on the TSCA Inventory or are not subject to the notification requirements (exempt).

| | |
|--|----------------|
| Section 5 Rules or Orders: | Not applicable |
| Section 6 Regulation of Existing Chemicals: | Not applicable |
| Section 7 Imminent Hazards: | Not applicable |
| Section 4 Test Rules / Section 12 Export Notification**: | Not applicable |

DOT - US DEPARTMENT OF TRANSPORTATION CLASSIFICATION

| | | | |
|----------------------|---------------|--------------------|-------------------------|
| Proper Shipping Name | Not Regulated | | |
| Hazard Class: | - | Primary Label: | - |
| ID Number: | - | Subsidiary Label: | - |
| Packing Group: | - | ERG Page Number: | - |
| Technical Names: | - | | |
| CERCLA RQ: | - | Emergency Contact: | CHEMTREC 1-800-424-9300 |
| RQ Substance: | - | RQ Pounds: | - |

[Container sizes: 55 gallon drums; 5 gallon pails; 2 oz. and 16 oz. samples]

CLEAN AIR ACT & RELATED INFORMATION

| | |
|---|-------------------------------------|
| Non-volatile percent (range)*: 99 (Average) | Method: ASTM D2369, 60 min. @ 110°C |
| Ozone Depleting Substances: Not applicable | |
| Hazardous Air Pollutants**: Not applicable | |

* Non-volatile information is not a specification.
** NOTE: Refer to the MSDS for percentages. HAP is listed if in product at 1% or 0.1% or greater.

RCRA - RESOURCE CONSERVATION AND RECOVERY AUTHORIZATION ACT

EPA Hazardous Waste Code(s): Not Applicable

FOOD, DRUGS AND COSMETICS ACT -- INDIRECT FOOD ADDITIVES (21 CFR)

Not Applicable

STATE LAWS

California Safe Drinking Water and Toxic Enforcement Act of 1986 -- Proposition 65

Not Applicable

New Jersey Trade Secret Registry Number for the product (NJTSRN): 800963-5071

CONEG Heavy Metal: BYK-Chemie USA certifies that this product does not contain Lead, Mercury, Cadmium or hexavalent chromium in the sum concentration of 100 ppm by weight or greater.

CANADIAN LAWS/REGULATIONS

DSL - Domestic Substance List: BYK-Chemie USA certifies that all of the components of this product are listed on the DSL

WHMIS Classification: Refer to the Identification Section of the product's MSDS, where applicable.

WHMIS Trade Secret Registry Number: Refer to the Hazardous Ingredient Section of the product's MSDS, where applicable.

Transportation of Dangerous Goods (TDG): Refer to the U.S. DOT Classification and to the TDG Regulations.

NATIONAL INVENTORIES

U.S. Toxic Substances Control Act (TSCA): Refer to U.S. Federal Laws Section
Canadian Domestic Substance List (DSL): Refer to Canadian Laws/Regulations Section

For other National Inventories, either contact the EHS Secretary or download the 'Product Information Sheet' from our web site - www.byk-chemie.com.

INFORMATION CHANGED: TSCA Section 4/12; Format - added flash point, NFPA classification

* * * * * END OF RIDS * * * * *