

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

Product name: Polytec PT-1126BD

Company: Polytec, Inc.
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Emergency telephone number: 800-424-9300 CHEMTREC (CCN 17585), Outside U.S. 703-527-3887

Product Use: Processing aid for industrial applications.

2. HAZARDS IDENTIFICATION

Appearance and Odor:

Form: Viscous liquid

Color: Milky

Odor: Aliphatic

Potential Health Effects:

See Section 11 for more information.

Eye: May cause slight irritation.

Skin: Slightly irritating.

Potential Physical/Chemical Effects:

Spills produce extremely slippery surfaces.

OSHA Regulatory Status:

This material is not considered hazardous in accordance with OSHA 29 CFR 1910.1200.

Potential Environmental Effects:

None. See Section 12 for more information.

Other information No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Identification:

Cationic water-soluble polymer in emulsion.

Regulated Components:

| Chemical Name | CAS Number: | Concentration/ -range: |
|---|-------------|------------------------|
| Distillates (petroleum), hydrotreated light | 64742-47-8 | 20 - 30% |
| Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched | 69011-36-5 | < 5% |

4. FIRST AID MEASURES

Inhalation: Move to fresh air immediately.

Skin contact: Wash off immediately with soap and plenty of water. In case of persistent skin irritation, consult a physician.

Eye contact: Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention.

Ingestion: Rinse mouth with water. Do not induce vomiting. Call a physician immediately.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Water. Water spray. Foam. Carbon dioxide (CO₂). Dry powder.

Unsuitable extinguishing media: None.

Precautions: Spills produce extremely slippery surfaces.

Special protective equipment for firefighters: No special protective equipment required. Wear self contained breathing apparatus for fire fighting if necessary.

Specific methods: Keep personnel removed and upwind of fire.

Specific hazards: In the event of fire the following can be released: Carbon Oxides. Nitrogen Oxides. Hydrogen chloride. Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

Flash point (°C): Does not flash.

Autoignition temperature (°C): Not applicable.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: No special precautions required. Wear adequate personal protective equipment (see Section 8 Exposure Controls/Personal Protection). Keep people away from spill/leak.

Environmental precautions: As with all chemical products, do not flush into surface water.

Methods for cleaning up: Do not flush with water. Dam up. Soak up with inert absorbent material. If liquid has been spilt in large quantities clean up promptly by scoop or vacuum. Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Handling: Avoid contact with skin and eyes. When preparing the working solution ensure there is adequate ventilation. When using do not smoke.

Storage: Keep in a dry cool place (0 - 30 °C). Keep away from heat and sources of ignition. Freezing will affect the physical condition and may damage the material.

Technical measures/Precautions: No special precautions required.

Incompatible products: Oxidising agents.

Technical measures/Storage conditions: No special storage conditions required.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists.

Personal protective equipment:

Respiratory protection: Not required ; except in case of aerosol formation.

Hand protection: PVC or other plastic material gloves.

Eye protection: Safety glasses with side-shields. Do not wear contact lenses where this product is used.

Skin and body protection: Chemical resistant apron or protective suit if splashing or repeated contact with solution is likely.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. When using do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|------------------------|
| Form: | Viscous liquid |
| Color: | Milky |
| Odor: | Aliphatic |
| pH: | 4 - 6 @ 5 g/L |
| Specific Gravity: | 1.0 - 1.1 |
| Melting point/range (°C): | < 5 |
| Flash point (°C): | Does not flash. |
| Boiling point (°C): | > 100 |
| Autoignition temperature (°C): | Not applicable. |
| Vapor pressure (mm Hg): | 2.3 kPa @ 20°C |
| Viscosity (mPa.s): | See Technical Bulletin |
| Water solubility: | Completely miscible |
| LogPow: | Not applicable. |
| Kinematic viscosity @ 40°C (mm²/s): | > 20.5 |

10. STABILITY AND REACTIVITY

Conditions to avoid: Avoid extremes of temperature. Protect from light, moisture and damage.

Stability: Stable. Hazardous polymerisation does not occur.

Materials to avoid: Oxidizing agents may cause exothermic reactions.

Hazardous decomposition products: Thermal decomposition may produce: hydrogen chloride gas, nitrogen oxides (NO_x), carbon oxides (CO_x). Hydrogen cyanide (hydrocyanic acid).

11. TOXICOLOGICAL INFORMATION

Product Information

Acute toxicity:

Oral: LD50/oral/rat > 5000 mg/kg

Dermal: LD50/dermal/rat > 5000 mg/kg

Inhalation: The product is not expected to be toxic by inhalation.

Irritation:

Skin: Slightly irritating.

Eyes: May cause slight eye irritation.

Sensitization: Not sensitizing.

Mutagenicity: Not mutagenic.

Carcinogenicity: Not carcinogenic.

Reproductive effects: Not toxic for reproduction.

Chronic toxicity: No chronic effects.

Other information: Due to the viscosity, this product does not present an aspiration hazard.

Component Information

Distillates (petroleum), hydrotreated light

Acute toxicity:

Oral: LD50/oral/rat > 5000 mg/kg (OECD 401)

Dermal: LD50/dermal/rabbit > 5000 mg/kg (OECD 402)

Inhalation: LC50/inhalation/4 h/rat = 4951 mg/m³ (OECD 403)

Irritation:

Skin: Not irritating. (OECD 404) Repeated exposure may cause skin dryness or cracking

Eyes: Not irritating. (OECD 405)

Sensitization: By analogy with similar products, this product is not expected to be sensitizing. (OECD 406)

Mutagenicity: Not mutagenic. (OECD 471, 473, 474, 476, 478, 479)

Carcinogenicity: Carcinogenicity study in rats (OECD 451): Negative

Reproductive effects: By analogy with similar substances, this substance is not expected to be toxic for reproduction.
NOAEL/rat = 300 ppm (OECD 421)

Chronic toxicity: No chronic effects.

Other information: May be fatal if swallowed and enters airways.

Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched

Acute toxicity:

Oral: LD50/oral/rat = 200 - 300 mg/kg

Dermal: LD50/dermal/rabbit > 2000 mg/kg

Inhalation: No data available.

Irritation:

Skin: Not irritating.

Eyes: Causes serious eye irritation

Sensitization: The results of testing on guinea pigs showed this material to be non-sensitizing.

Mutagenicity: Not mutagenic.

Carcinogenicity: Not carcinogenic.

Reproductive effects: Two-Generation Reproduction Toxicity (OECD 416)
NOAEL/rat > 250 mg/kg/day Prenatal Development Toxicity Study (OECD 414)
NOAEL/Maternal toxicity/rat > 50 mg/kg/day
NOAEL/Developmental toxicity/rat > 50 mg/kg/day

Chronic toxicity: NOAEL/oral/rat/600 days = 50 mg/kg/day

12. ECOLOGICAL INFORMATION

Product Information

Aquatic toxicity:

Toxicity to fish: LC50/Fish/96 hours = 10 - 100 mg/L (Estimated)

Toxicity to daphnia: EC50/Daphnia/48 hours = 10 - 100 mg/L (Estimated)

Toxicity to algae: Algal inhibition tests are not appropriate. The flocculation characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.

Environmental fate:

Persistence and degradability: Readily biodegradable.

Hydrolysis: At natural pHs (>6) the polymer degrades due to hydrolysis to more than 70% in 28 days. The hydrolysis products are not harmful to aquatic organisms.

Bioaccumulation: The product is not expected to bioaccumulate.

LogPow: Not applicable.

LogKow: Not determined.

Component Information

Distillates (petroleum), hydrotreated light

Acute toxicity to fish:

Toxicity to fish: LC0/Oncorhynchus mykiss/96 hours > 1000 mg/L (OECD 203)

Toxicity to daphnia: EC0/Daphnia magna/48 hours > 1000 mg/L (OECD 202)

Toxicity to algae: IC0/Pseudokirchneriella subcapitata/72 hours > 1000 mg/L (OECD 201)

Environmental fate:

Persistence and degradability: Readily biodegradable.

Hydrolysis: Does not hydrolyse.

Bioaccumulation: The product is not expected to bioaccumulate.

LogPow: 3 - 6

LogKow: Not determined.

Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched

Toxicity to fish: LC50/Cyprinus carpio/96 hours = 1 - 10 mg/L (OECD 203)

Toxicity to daphnia: EC50/Daphnia/48 hours = 1 - 10 mg/L (OECD 202)

Toxicity to algae: IC50/Desmodesmus subspicatus/72 hours = 1 - 10 mg/L (OECD 201)

Environmental fate:

Persistence and degradability: Readily biodegradable. > 60% / 28 days (OECD 301 B)

Hydrolysis: Does not hydrolyse.

Bioaccumulation: No data available

LogPow: > 3

LogKow: Koc > 5000

13. DISPOSAL CONSIDERATIONS

Disposal: Dispose of in accordance with local, state and federal regulations.

Container: Rinse empty containers with water and use the rinse water to prepare the working solution. Can be landfilled or incinerated, when in compliance with local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT:

Not classified as dangerous in the meaning of DOT regulations.

IMDG/IMO:

Not classified as dangerous in the meaning of IMO/IMDG regulations.

ICAO/IATA:

Not classified as dangerous in the meaning of ICAO/IATA regulations.

15. REGULATORY INFORMATION

Product Information

US SARA Reporting Requirements: None.

RCRA status : Not RCRA hazardous.

SARA (Section 311/312) hazard class: Not concerned.

California Proposition 65 Information: WARNING! This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm, Acrylamide.

International Inventories:

USA (TSCA): All components of this product are either listed on the inventory or are exempt from listing.

Canada (DSL): All components of this product are either listed on the inventory or are exempt from listing.

China (IECSC): All components of this product are either listed on the inventory or are exempt from listing.

European Union (REACH): All components of this product have been registered or pre-registered with the European Chemicals Agency or are exempt from registration.

Australia (AICS): All components of this product are either listed on the inventory or are exempt from listing.

Japan (ENCS): All components of this product are either listed on the inventory or are exempt from listing.

Korea (ECL): All components of this product are either listed on the inventory or are exempt from listing.

Philippines (PICCS): All components of this product are either listed on the inventory or are exempt from listing.

Taiwan (CSNN): All components of this product are either listed on the inventory or are exempt from listing.

New Zealand (NZIoC): All components of this product are either listed on the inventory or are exempt from listing.

16. OTHER INFORMATION

NFPA and HMIS Ratings :

NFPA:

| | |
|---------------|---|
| Health: | 1 |
| Flammability: | 1 |
| Instability: | 0 |



HMIS:

| | |
|------------------|---|
| Health: | 1 |
| Flammability: | 1 |
| Physical Hazard: | 0 |
| PPE Code: | B |

This MSDS was prepared in accordance with the following:

ISO 11014-1: Material Safety Data Sheet for Chemical Products

ANSI Z400.1-2004; Material Safety Data Sheets - Preparation

Revision Number: 14.01a

ENCC004

The data in this Material Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained. This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.