

# SAFETY DATA SHEET

## Poly-Tone Rejuvenator

### 1 – IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY UNDERTAKING

PRODUCT NAME: **Poly-Tone Rejuvenator**  
PRODUCT NUMBER: RJ1200  
RECOMMENDED USE: Aircraft coatings and cleaners  
RESTRICTIONS ON USE: Not applicable  
SUPPLIER: Poly-Fiber, Inc.  
P.O. Box 3129, Riverside, CA 92519, USA  
4343 Fort Drive, Riverside, CA 92509, USA  
(951) 684-4280  
(951) 809-7144  
(760) 782-1947  
EMERGENCY TELEPHONE: (800) 424-9300 (Chemtrec- US)  
(703) 527-3887 (International – Call Collect)

### 2 - HAZARDS IDENTIFICATION

#### GHS Hazard Category

Flammable liquid- Category 2  
Eye Irritation - Category 2A  
Skin Irritation- Category 2  
Respiratory Irritation- Category 3  
Specific target organ toxicity (single exposure) – Category 3, Central Nervous System H336

#### Label Elements

##### Pictograms



##### Signal Word

**DANGER**

#### Hazard Statements

**⚠ WARNING:** This product can expose you to chemicals including Methyl Isobutyl Ketone, which is known to the State of California to cause cancer, and Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Highly flammable. Irritating to eyes and skin

May cause drowsiness or dizziness

Harmful: danger of serious damage to health by prolonged exposure through inhalation

Possible risk of harm to the unborn child

This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Harmful: may cause lung damage if swallowed

#### Precautionary Statements

#### Prevention

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Store in a well-ventilated place. Keep container tightly closed. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe mist/vapors/spray. Use only outdoors or in a well-ventilated area.  
Vapors may cause drowsiness and dizziness.

## Response

### INHALATION:

Move the victim to a fresh air place immediately. Get medical attention if discomforts persist.

### INGESTION:

Rinse mouth with clean water immediately. DO NOT induce vomiting. Get medical attention immediately. If vomiting occurs, keep the victim's head low so that vomits from the stomach will not enter the lungs.

### SKIN CONTACT:

Remove contaminated clothing and flush the affected skin areas with clean water for at least 15 minutes. Get medical attention if discomforts persist.

### EYES CONTACT:

Make sure all contact lenses are removed before flushing the eyes with eye lids open with clean water for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

## Storage

Store in a well-ventilated Place. Keep container tightly closed. Keep cool. Store in a locked cabinet, cage or room.

## Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

CLASSIFICATION (1999/45) XI, XN, F, R10, R11, R12, R20/21/22, R36/38, R45, R67

### 3 – COMPOSITION /INFORMATION ON INGREDIENTS

| Name                      | EC No.    | CAS No.  | Content % | Classification (67/548/EEC)                                 |
|---------------------------|-----------|----------|-----------|---|
| Toluene*                  | 203-625-9 | 108-88-3 | 15-60%    | R11, R20, S16, S25, S29, S33                                |
| Methyl Ethyl Ketone*      | 201-159-0 | 78-93-3  | 2-45%     | XI, F, R11, R36, R66, R67                                   |
| Methyl Isobutyl Ketone*   | 203-550-1 | 108-10-1 | 5-47%     | XI, F, R11, R20, S29, S9, S16                               |
| Methyl n-Amyl Ketone*     | 203-767-1 | 110-43-0 | 3-29%     | R10, R22, S23   |
| Glycol Ether EB*          | 203-905-0 | 111-76-2 | 0-10%     | XN, R20/21/22, R36/38, S36/37, S46                          |
| Propylene Oxide*          | 200-879-2 | 75-56-9  | 0-10%     | R12, R20, R21, R22, R36, R37, R38, R45, R46, S45, S53       |
| n-Butanol*                | 200-751-6 | 71-36-3  | 0-10%     | XN, R10, R22, R37/38, R41, R67, S13, S26, S37/39, S46, S7/9 |
| Cyclohexanone*            | 203-631-1 | 108-94-1 | 10-50%    | XN, R10, R20, S25   |
| Acetone*                  | 200-662-2 | 67-64-1  | 10-45%    | XI, F, R11, R36, R66, R67, S16, S26, S9                     |
| Ethyl 3-Ethoxypropionate* | 212-112-9 | 763-69-9 | 20-65%    | XI, R10, R36, S16, S25, S33, S9                             |

The Full Text for all R-Phrases and S-Phrases is displayed in Section 15

\*This material is subject to the reporting requirements of section 313 of the Emergency Planning and the Community Right-To-Know Acts of 1986 and of 40 CFR 372.

### COMPOSITION COMMENTS

The data shown are in accordance with the latest EC Directives.

### 4- FIRST AID MEASURES

**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.

**INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:**

Breathing vapor may irritate the nose and throat. Central nervous system effects including excitation, euphoria, contracted eye pupil, dizziness, blurred vision, fatigue, nausea, headache, loss of consciousness, respiratory arrest and sudden death could occur on long term and/or high concentration exposures vapors.

**SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:**

Contact with the skin or eyes may cause irritation. Prolonged or repeated contact can cause moderate irritation, defatting, and/or dermatitis. Skin and eyes should be flushed with water for at least 15 minutes.

**INGESTION HEALTH RISK AND SYMPTOMS OF EXPOSURE:**

Preexisting eye, skin, heart, central nervous system and respiratory disorders may be aggravated by exposure to this product.

**HEALTH HAZARDS (ACUTE AND CHRONIC):**

Overexposure may cause anesthesia, headache, nausea or dizziness. Breathing the vapors may irritate the nose and throat. Detectable amounts of chemicals or substances known to the state of California to cause cancer, birth defects, or other reproductive harm may be found in this product. Use care when handling chemical and petroleum products even though they are water reducible.

CARCINOGENICITY: NTP CARCINOGEN: N/A IARC MONOGRAPHS: N/A OSHA REGULATED: N/A

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE TO THIS PRODUCT:**

Preexisting eye, skin, heart, central nervous system and respiratory disorders may be aggravated by exposure to this product.

**EMERGENCY AND FIRST AID PROCEDURES:**

Remove victim to fresh air and restore breathing if required. Call a physician if required. If breathing stops, give artificial respiration. Keep person warm. Never give anything by mouth to an unconscious person. Do not induce vomiting. If spontaneous vomiting occurs, keep head below hips to prevent aspiration of liquid into the lungs. Vapor may irritate the nose and throat.

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**5- FIRE FIGHTING PROCEDURES****EXTINGUISHING MEDIA:**

CO<sub>2</sub>, Dry Chemical, Water Fog

**SPECIAL FIREFIGHTING PROCEDURES:**

Do not use a direct stream of water. Product may float and can be reignited on the surface of the water. Do not enter a confined area without full bunker gear including a positive pressure NIOSH-approved self-contained breathing apparatus. Decomposition products may form toxic materials.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

Never use welding or cutting torch on or near drum (even empty) because residue or product can ignite explosively. Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by pilot lights, flames and other ignition sources at locations distant from the material handling point.

Flammable material.

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**6-ACCIDENTAL RELEASE MEASURES****PERSONAL PRECAUTIONS:**

Wear protective clothing as described in Section 8.

**ENVIRONMENTAL PRECAUTIONS:**

Spillages or uncontrolled discharges into watercourses must immediately be alerted to Environmental Agency or other appropriate regulatory authority.

**SPILL CLEANUP METHODS:**

Keep combustibles away from spilled material. Extinguish all ignition sources. Avoid sparks, open flames, and smoking. Ventilate. Absorb in vermiculite, dry sand, or earth and place into containers for disposal.

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**7-HANDLING AND STORAGE****USAGE PRECAUTIONS:**

Keep away from heat, sparks and open flames. Avoid spilling, skin and eyes contact. Use with adequate ventilation and avoid excessive exposure to solvent vapors. Use approved respirator if air contamination exceeds the accepted level.

**STORAGE PRECAUTIONS:**

**FLAMMABLE/Combustible.** Keep away from oxidizers, open flames and other ignition sources. Keep unused contents in original container and tightly closed lids. Store in a cool, dry and well-ventilated place and at an ambient Temperature not to exceeding above 120° F.

**STORAGE CLASS:**

FLAMMABLE liquid storage.

**8-EXPOSURE CONTROL/PERSONAL PROTECTION**

| Name                      | Workplace Exposure Limits  | Remarks   |
|---------------------------|--|---|
| Toluene                   | ACGIH: 20 ppm TWA<br>NIOSH: 100 ppm TWA; 375 mg/m <sup>3</sup> TWA 500 ppm IDLH<br>OSHA-Final PELs: 200 ppm TWA; 300 ppm Ceiling                                       | Consult local authorities for acceptable exposure limits. |
| Methyl Ethyl Ketone       | ACGIH: 200ppm TWA; 300ppm STEL<br>NIOSH: 200ppm TWA;590 mg/m <sup>3</sup> TWA; 3000ppm IDLH<br>OSHA –Final PELs: 200ppm TWA; 590 mg/m <sup>3</sup> TWA                 | Same As Above   |
| Methyl Isobutyl Ketone    | ACGIH: 50 ppm; 75 ppm STEL<br>NIOSH: 50 ppm TWA; 205 mg/m <sup>3</sup> TWA 500 ppm IDLH<br>OSHA-Final PELs: 100 ppm TWA; 410 mg/m <sup>3</sup> TWA                     | Same As Above   |
| Methyl N-Amyl Ketone      | ACGIH: 50 ppm TWA<br>OSHA: 100 ppm TWA   | Same As Above   |
| Glycol Ether EB           | ACGIH: 20 ppm TWA<br>NIOSH: 5 ppm TWA; 24 mg/m <sup>3</sup> TWA 700 ppm IDLH<br>OSHA-Final PELs: 50 ppm TWA; 240 mg/m <sup>3</sup> TWA                                 | Same As Above   |
| Propylene Oxide           | ACGIH: 2ppm TWA<br>NIOSH: 400 ppm TWA<br>OSHA-Final PELs: 100ppm TWA,240 mg/m <sup>3</sup> TWA   | Same As Above   |
| n-Butanol                 | ACGIH: 20 ppm TWA<br>NIOSH: 1400 ppm IDLH<br>OSHA-Final PELs: 100 ppm TWA; 300 mg/m <sup>3</sup> TWA   | Same As Above   |
| Cyclohexanone             | ACGIH: 20 ppm TWA; 50 ppm STEL; Skin - potential significant contribution to overall exposure by the cutaneous route   | Same As Above   |
| Acetone                   | ACGIH: 500 ppm TWA; 750 ppm STEL<br>NIOSH: 250 ppm TWA; 590 mg/m <sup>3</sup> TWA 2500 ppm IDLH (10% LEL)<br>OSHA-Final PELs: 1000 ppm TWA; 2400 mg/m <sup>3</sup> TWA | Same As Above   |
| Ethyl 3-Ethoxypropionate. | ACGIH: None Listed<br>NIOSH: None Listed<br>OSHA-Final PELs: None Listed   | Same As Above   |



PROTECTIVE EQUIPMENTS:  
 PROCESS CONDITIONS:  
 ENGINEERING MEASURES:  
 RESPIRATORY EQUIPMENT:  
 HANDPROTECTION:  
 EYE PROTECTION:  
 OTHER PROTECTION:  
 HYGIENE MEASURES:

Provide eyewash station.  
 Provide adequate ventilation. Fully equipped spray booth is recommended to ensure the workers legal exposure limits are not exceeded.  
 Wear respirator with appropriate cartridge for organic solvents and chemicals.  
 Wear approved gloves such as Neoprene, Nitrile or Rubber types.  
 Wear splash-proof goggles.  
 Wear appropriate clothing to prevent any possible skin contact.  
 DO NOT SMOKE IN THE WORK AREA. Wash at the end of each work shift and before eating, drinking or smoking. Promptly remove contaminated clothing.

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**9- PHYSICAL AND CHEMICAL PROPERTIES**

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|   |                        |
|---|------------------------|
| APPEARANCE:   | Liquid                 |
| COLOR:  | Clear                  |
| ODOR:   | Ketone characteristics |
| BOILING POINT:  | 175-300° F             |
| RELATIVE DENSITY:                                     | 0.89 g/mL              |
| VAPOR DENSITY:  | Heavier than air       |
| FLASH POINT:  | 45°F (Closed Cup)      |
| FLAMMABILITY LIMITS:                                  | N.A. (Lower%)          |
| SOLUBILITY VALUE<br>(g/100g H <sub>2</sub> O @ 20°C): | Insoluble              |
| VOLATILE ORGANIC COMPOUND<br>(VOC):                   | 683.10 g/L             |

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**10- STABILITY AND REACTIVITY**

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**STABILITY:**

Stable

**CONDITIONS TO AVOID:**

Heat and fires. Ignition sources.

**INCOMPATIBILITY (MATERIALS TO AVOID):**

Strong alkalis or strong oxidizers. This material may dissolve some plastics, rubber compounds or coatings. May react strong with acids while in liquid form.

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS:**

Hydrogen chloride and very small amounts of phosgene and chlorine.

**HAZARDOUS POLYMERIZATION:**

N/A

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**11-TOXICOLOGICAL INFORMATION**

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**Toluene (CAS# 108-88-3):** ACGIH: A4-Not Classifiable as a Human Carcinogen; IARC: Group 3 carcinogen; No other toxicological information available.

**Methyl Ethyl Ketone (CAS# 78-93-3):** LD50/rabbit/skin/draize test = 500mg/24H Moderate; LC50/mouse/inhalation = 32mg/m<sup>3</sup>/4H; Carcinogenicity: Not listed by ACGIH, IARC, NIOSH, NTP or OSHA. **Isopropyl Alcohol (CAS#67-63-0):** LD50/LC50: Draize test, rabbit, eye: 100 mg Severe; Draize test, rabbit, eye: 100 mg Moderate; Draize test, rabbit, eye: 100 mg/24H Moderate; Draize test, rabbit, skin: 500 mg Mild; Inhalation, mouse: LC50 = 53000 mg/m<sup>3</sup>; Inhalation, rat: LC50 = 16000 ppm/8H; Inhalation, rat: LC50 = 72600 mg/m<sup>3</sup>; Oral, mouse: LD50 = 3600 mg/kg; Oral, mouse: LD50 = 3600 mg/kg; Oral, rabbit: LD50 = 6410 mg/kg; Oral, rat: LD50 = 5045 mg/kg; Oral, rat: LD50 = 5000 mg/kg; Skin, rabbit: LD50 = 12800. Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Epidemiology: No information found. Teratogenicity: A rat & rabbit developmental toxicity study showed no teratogenic effects at doses that were clearly maternally toxic. In a separate rat study, no evidence of developmental neurotoxicity was associated with gestational exposures to IPA up to 1200 mg/kg/d. Reproductive Effects: See actual entry in RTECS for complete information. Mutagenicity: See actual entry in RTECS for complete information. Neurotoxicity: In rats exposed to isopropanol by inhalation, acute neurotoxicity was noted at 1 and 6 hours at 5000 ppm, but only minimal effects were seen at 1500 ppm and the animals recovered within 5 hours. No toxicity was noted at 500 ppm.

**Methyl Isobutyl Ketone (CAS#108-10-1):** LD50/rat/oral = 2080mg/kg; Carcinogenicity: Not listed by NTP or IARC.

**Methyl n-Amyl Ketone (CAS#110-43-0):** LD50/rabbit/dermal = 12.6mL/kg; LD50/rat/oral = 1600mg/kg; Carcinogenicity: Not listed by IARC, NTP or OSHA.

**Glycol Ether EB (CAS#111-76-2):** Carcinogenicity: Not listed by NTP, IARC or OSHA.

**Propylene Oxide (CAS#75-56-9):** **Routes of Entry:** Dermal contact. Eye contact. Inhalation. Ingestion. **Toxicity to Animals:** WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 380 mg/kg [Rat]. Acute dermal toxicity (LD50): 1500 mg/kg [Rabbit]. Acute toxicity of the vapor (LC50): 4000 ppm 4 hour(s) [Rat]. LC50/mouse = 1740ppm,4 hrs; Carcinogenicity: listed in NTP and classified by IARC **Chronic Effects on Humans:**

**CARCINOGENIC EFFECTS:** Classified 2 (Reasonably anticipated.) by NTP. The substance is toxic to lungs, mucous membranes.  
**Other Toxic Effects on Humans:** Very hazardous in case of ingestion, of inhalation. Hazardous in case of skin contact (irritant, permeator).  
**Special Remarks on Toxicity to Animals:** Not available. **Special Remarks on Chronic Effects on Humans:** Not available. **Special Remarks on other Toxic Effects on Humans:** Not available.

**n-Butanol (CAS#71-36-3)** : Acute toxicity data:  
 Oral LD-50:(rat) 2,500 mg/kg  
 Oral LD-50:(rabbit) 3,400 mg/kg  
 Inhalation LC-50: (rat) 4 h: > 8000 ppm  
 Dermal LD-50: ( rabbit) 5,300 mg/kg  
 Skin Irritation (rabbit) slight  
 Eye Irritation (rabbit) strong

**Cyclohexanone (CAS#108-94-1)** : **LD50/LC50:** Draize test, rabbit, eye: 20 mg Severe; Draize test, rabbit, eye: 250 ug/24H Severe; Inhalation, mouse: LC50 = 2375 mg/m<sup>3</sup>; Inhalation, rat: LC50 = 8000 ppm/4H; Inhalation, rat: LC50 = 19000 mg/m<sup>3</sup>; Oral, mouse: LD50 = 1400 mg/kg; Oral, rat: LD50 = 1620 uL/kg; Oral, rat: LD50 = 1800 mg/kg; Skin, rabbit: LD50 = 1 mL/kg;<BR.  
**Carcinogenicity:** **ACGIH:** A3 - Confirmed animal carcinogen with unknown relevance to humans **Epidemiology:** No data available.  
**Teratogenicity:** Animal studies have only shown harmful effects in the offspring of animals exposed to doses which also produced significant maternal toxicity. **Reproductive Effects:** See actual entry in RTECS for complete information. **Neurotoxicity:** No data available. **Mutagenicity:** See actual entry in RTECS for complete information.

**Acetone (CAS#67-64-1)** : **LD50/LC50:** Dermal, guinea pig: LD50 = >9400 uL/kg; Draize test, rabbit, eye: 20 mg Severe; Draize test, rabbit, eye: 20 mg/24H Moderate; Draize test, rabbit, eye: 10 uL Mild; Draize test, rabbit, skin: 500 mg/24H Mild; nhalation, mouse: LC50 = 44 gm/m<sup>3</sup>/4H; Inhalation, rat: LC50 = 50100 mg/m<sup>3</sup>/8H; Oral, mouse: LD50 = 3 gm/kg; Oral, rabbit: LD50 = 5340 mg/kg; Oral, rat: LD50 = 5800 mg/kg; **Carcinogenicity:** Not listed by ACGIH, IARC, NTP, or CA Prop 65. **Epidemiology:** In a series of studies, no statistically significant differences in causes of death or clinical laboratory results were observed in 948 employees exposed to up to 1070 ppm acetone over 23 years. **Teratogenicity:** Animal studies have only shown harmful effects in the offspring of animals exposed to doses which also produced significant maternal toxicity. **Reproductive Effects:** During the Stewart et al. study, four adult female volunteers were exposed 7.5 hours to acetone vapor at a nominal concentration of 1000 ppm. Three of the four women experienced premature menstrual periods which were attributed to the acetone exposure. **Mutagenicity:** Sex chromosome loss and nondisjunction(Yeast - Saccharomyces cerevisiae) = 47600 ppm; Cytogenetic analysis(Rodent - hamster Fibroblast)= 40 gm/L. **Neurotoxicity:** No information found.

**Ethyl 3-Ethoxypropionate (CAS#763-69-9):** Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Toxicity to Animals: Acute oral toxicity (LD50): 5000 mg/kg [Rat]. Acute dermal toxicity (LD50): 10000 mg/kg [Rabbit].  
 Chronic Effects on Humans: **CARCINOGENIC EFFECTS:** Classified + (PROVEN) by OSHA. Classified None. by NIOSH.  
 Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), . Slightly hazardous in case of inhalation (lung irritant).  
 Special Remarks on Toxicity to Animals: Not available. Special Remarks on Chronic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available.

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## 12- ECOLOGICAL INFORMATION

**Toluene (CAS#108-88-3):** Ecotoxicity : No data available; Environmental : From soil, substance evaporates and is microbially biodegraded. In water, substance volatilizes and biodegrades; Physical : Photochemically produced hydroxyl radicals degrade substance.

**Methyl Ethyl Ketone (CAS#78-93-3):** Ecotoxicity : Fish/Fathead Minnow/LC50 = 3220mg/l; Environmental : Substance evaporates in water with T1/2=3D (rivers) to 12D (lakes); Physical : Substance photodegrades in air with T1/2=2.3 days.

**Methyl Isobutyl Ketone (CAS#108-10-1):** Ecotoxicity : Not expected to be toxic to terrestrial life; Environmental : substance evaporates and biodegrades when released to soil, water and air.

**Methyl n-Amyl Ketone (CAS#110-43-0):** Ecotoxicity: No data available.

**Glycol Ether EB (CAS#111-76-2):** Ecotoxicity: Not expected to be toxic to aquatic life. Environmental: substance evaporates and biodegrades when released to soil, water and air.

**Propylene Oxide (CAS#75-56-9):** Ecotoxicity: No adverse ecological effects expected. Environmental: This substance does not contain Class I and II ozone-depleting chemical. **BOD5 and COD:** Not available. **Products of Biodegradation:** Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.  
**Toxicity of the Products of Biodegradation:** The products of degradation are as toxic as the original product. **Special Remarks on the Products of Biodegradation:** Not available.

**n-Butanol (CAS#71-36-3)** : Acute toxicity data

**Oxygen Demand Data:** BOD-5: 1,710 mg/g BOD-20: 1,890 mg/g COD (Chemical Oxygen Demand): 2,460 mg/g

**Acute Aquatic Effects Data:** 24 h LC-50 (goldfish): 1000 - 1400 mg/l 48 h LC-50 (golden orfe): 1770 mg/l 24 h LC-50 (daphnid): 1855 mg/l

**Cyclohexanone (CAS#108-94-1)** : **Ecotoxicity:** Fish: Rainbow trout: LC50 = 90.0 mg/L; 96 Hr.; 320.0 mg/L CaCO<sub>3</sub>Fish: Rainbow trout: LC50 = 44.0 mg/L; 96 Hr.; 20.0 mg/L CaCO<sub>3</sub>Fish: Fathead Minnow: LC50 = 527.0 mg/L; 96 Hr.; Flow-through, 24-26 degrees C, pH7.5 Water flea Daphnia: EC50 = 820.0 mg/L; 48 Hr.; Unspecified Algae: EC50 = 20.0 mg/L; 96 Hr.; Unspecified Bacteria:

Phytobacterium phosphoreum: EC50 = 18.7 mg/L; 5 minutes; Microtox Test No data available. **Environmental:** This chemical is expected to rapidly volatilize based on its low melting and boiling point. Cyclohexanone is estimated to be highly mobile in soil. In view of its moderate vapor pressure and low adsorption to soil, it would be expected to volatilize from surface soil. Although data are lacking, it may also undergo direct photolysis on the soil surface. Cyclohexanone is readily biodegradable according to aerobic screening tests and therefore would be expected to biodegrade in soil. **Physical:** No information found. **Other:** The bioconcentration factor (BCF) for cyclohexanone can be estimated to be 2.4 based on the log Kow of 0.81 and a recommended regression equation. This BCF indicates that cyclohexanone will not bioconcentrate in aquatic organisms

**Acetone (CAS#67-64-1) :** Ecotoxicity: Fish: Rainbow trout: 5540 mg/l; 96-hr; LC50Fish: Bluegill/Sunfish: 8300 mg/l; 96-hr; LC50 No data available. Environmental: Volatilizes, leeches, and biodegrades when released to soil. TERRESTRIAL FATE: If released on soil, acetone will both volatilize and leach into the ground. Acetone readily biodegrades and there is evidence suggesting that it biodegrades fairly rapidly in soils. AQUATIC FATE: If released into water, acetones will probably biodegrade. It is readily biodegradable in screening tests, although data from natural water are lacking. It will also be lost due to volatilization (estimated half-life 20 hr from a model river). Adsorption to sediment should not be significant. Physical: ATMOSPHERIC FATE: In the atmosphere, acetone will be lost by photolysis and reaction with photo chemically produced hydroxyl radicals. Half-life estimates from these combined processes are 79 and 13 days in January and June, respectively, for an overall annual average of 22 days. Therefore considerable dispersion should occur. Being miscible in water, wash out by rain should be an important removal process. This process has been confirmed around Lake Shinsei-ko in Japan. There acetone was found in the air and rain as well as the lake

**Ethyl 3-Ethoxypropionate (CAS#763-69-9):** Ecotoxicity: Not available. BOD5 and COD: Not available. Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

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### 13 – DISPOSAL CONSIDERATIONS

Hazardous wastes should be sent to a RCRA approved incinerator or disposed of in a RCRA approved waste facility. Dispose of container and unused contents in accordance with federal, state and local requirements.

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### 14 – TRANSPORT INFORMATION

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830 – United Kingdom (UK)

#### DOT / ADR / RID Classification:

|                                      |                                |
|--------------------------------------|--------------------------------|
| DOT /ADR / RID PROPER SHIPPING NAME: | <b>PAIN T RELATED MATERIAL</b> |
| PRIMARY HAZARD CLASS/DIVISION:       | <b>3</b>                       |
| UN/JA NUMBER:                        | <b>UN1263</b>                  |
| PACKING GROUP:                       | <b>II</b>                      |

#### IMDG and ADN Classification:

|                            |                                |
|----------------------------|--------------------------------|
| IMDG PROPER SHIPPING NAME: | <b>PAIN T RELATED MATERIAL</b> |
| IMDG UN CLASS:             | <b>3</b>                       |
| IMDG UN NUMBER:            | <b>UN1263</b>                  |
| IMDG PACKING GROUP:        | <b>II</b>                      |
| IMDG LABEL:                | <b>FLAMMABLE LIQUID</b>        |
| IMDG VESSEL STOWAGE:       | <b>B</b>                       |

Air shipping this product is not advised and if done must be handled by a certified carrier according to IATA rules.

GHS LABEL:



**DANGER**

**HIGHLY FLAMMABLE LIQUID AND VAPOR. VAPOR HARMFUL. CAUSES SERIOUS EYE DAMAGE. MAY CAUSE ALLERGIC SKIN REACTION. HARMFUL OR FATAL IF SWALLOWED AND ENTERS AIRWAYS.**

Refer to MSDS for additional information on safe handling / use. - Keep out of reach of children.  
For industrial use only.

**Contains:** Toluene, Methyl Isobutyl Ketone, Methyl n-Amyl Ketone, Methyl Ethyl Ketone, Propylene Oxide, n-Butanol, Glycol Ether EB, Cyclohexanone, Acetone and Ethyl 3-Ethoxypropionate. This product contains one or more chemicals known to the State of California to cause cancer, birth defects, and/or other reproductive harm.

**Hazards:** H225: Highly flammable liquid and vapor. H318: Causes serious eye damage. H315: Causes skin irritation. H336: May cause drowsiness or dizziness. H335: May cause respiratory irritation. H373: May cause damage to organs through prolonged or repeated exposure: Inhalation - auditory dysfunction. H317: May cause an allergic skin reaction. H304: May be fatal if swallowed and enters airways. H412: Harmful to aquatic life with long lasting effects. H361: Suspected of damaging fertility or the unborn child.

**Precautionary Statement(s):** P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P403+P233: Store in a well-ventilated place. Keep container tightly closed. P280: Wear protective gloves/protective clothing/eye protection/face protection. P260: Do not breathe mist/vapours/spray. P271: Use only outdoors or in a well-ventilated area. P264: Wash (hands and exposed skin) thoroughly after handling.

**First Aid:** **Inhalation** - Move person to fresh air. If symptoms occur obtain medical attention. **Skin Contact** - Wash affected skin with soap and water. If symptoms occur obtain medical attention. **Eye Contact** - If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. Get immediate medical attention. **Ingestion** - Do not induce vomiting. Drink one glass of water. If symptoms occur obtain medical attention

**15 – REGULATORY INFORMATION**

**Hazards:** H225: Highly flammable liquid and vapor. H318: Causes serious eye damage. H315: Causes skin irritation. H336: May cause drowsiness or dizziness. H335: May cause respiratory irritation. H373: May cause damage to organs through prolonged or repeated exposure: Inhalation - auditory dysfunction. H317: May cause an allergic skin reaction. H304: May be fatal if swallowed and enters airways. H412: Harmful to aquatic life with long lasting effects. H361: Suspected of damaging fertility or the unborn child.

**Precautionary Statement(s):** P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking. P403+P233: Store in a well-ventilated place. Keep container tightly closed. P280: Wear protective gloves/protective clothing/eye protection/face protection. P260: Do not breathe mist/vapors/spray. P271: Use only outdoors or in a well-ventilated area. P264: Wash (hands and exposed skin) thoroughly after handling.

CODES:



Xi and XN



F

- Xi=irritant
- XN=harmful
- F=highly flammable

R-Phrases:

R10: Flammable  
R11: Highly Flammable



R12: Extremely Flammable  
R20: Harmful by inhalation  
R21: Harmful in contact with skin  
R22: Harmful if swallowed  
R20/21/22: Harmful by inhalation, in contact with skin and if swallowed  
R36: Irritating to eyes  
R37: Irritating to respiratory system  
R38: Irritating to skin  
R36/38: Irritating to eyes and skin  
R37/38: Irritating to respiratory system and skin  
R41: Risk of serious damage to eyes  
R45: May cause cancer  
R46: May cause heritable genetic damage  
R66: Repeated exposure may cause skin dryness or cracking  
R67: Vapors may cause drowsiness and dizziness

## S-Phrases:

S7/9: Keep container tightly closed and in a well-ventilated place  
S9: Keep container in a well-ventilated place  
S13: Keep away from food, drink and animal feeding stuffs  
S16: Keep away from sources of ignition - No smoking  
S23: Do not breathe gas/fumes/vapor/spray  
S25: Avoid contact with eyes  
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice  
S29: Do not empty into drains  
S33: Take precautionary measures against static discharges  
S36/37: Wear suitable protective clothing and gloves  
S37/39: Wear suitable gloves and eye/face protection  
S46: If swallowed, seek medical advice immediately and show this container or label

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**16- DISCLAIMER**

Above information is based on data supplied to us and is believed to be correct. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since the data made available subsequent to the date hereof may suggest modifications of the information, we do not assume responsibility for the results of its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose. It is the user's obligation to determine the safe use of it.