**Eastwood Silver Hi-Temp Coating Silver**

*according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations*

## SECTION 1 - IDENTIFICATION

### 1.1 Product Identifier

**Product Name** : *EW Silver Hi-Temp Coating Silver*

**Supplier Product Numbers** : *10396Z*

### 1.2 Other Means of Identification

**Other Identifiers** : *Not Applicable*

### 1.3 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

**Recommended Use** : *Coating used to produce custom look for manifolds and headers.*

**Restrictions on Use** : *None Identified*

### 1.4 Supplier Details

| | Supplier Details |
|---|---|
| **Company Name** : | |
| **Address** : | *The Easthill Group, Inc./The Eastwood Company*<br>*263 Shoemaker Road, Pottstown, PA 19464 - United States* |
| **Phone Number** : | *610-343-9353* |
| **Fax Number** : | *610-323-6268* |
| **Email** : | |
| **Website** : | *www.eastwood.com* |

### 1.5 24 hr Emergency Phone Number

**Emergency Number** : *800-424-9300 ChemTrec*

## SECTION 2 - HAZARDS IDENTIFICATION

### 2.1 Classification of the Substance or Mixture

| | | | |
|---|---|---|---|
| *Flam. Aerosol 1* | *H222* | *Physical Hazards* | *Flammable aerosol Category 1* |
| *Press. Gas (Diss.)* | *H280* | *Physical Hazards* | *Gases under pressure Dissolved gas* |
| *Eye Irrit. 2* | *H319* | *Health Hazards* | *Serious eye damage/eye irritation Category 2* |
| *Repr. 2* | *H361* | *Health Hazards* | *Reproductive toxicity Category 2* |
| *Stot Se 1* | *H370* | *Health Hazards* | *Specific target organ toxicity (single exposure) Category 1* |
| *Stot Se 3* | *H336* | *Health Hazards* | *Specific target organ toxicity (single exposure) Category 3* |
| *Stot Re 2* | *H373* | *Health Hazards* | *Specific target organ toxicity (repeated exposure) Category 2* |
| *Aquatic Acute 3* | *H402* | *Environmental Hazards* | *Hazardous to the aquatic environment - Acute Hazard Category 3* |

### 2.2 Label Elements

**Hazard Pictograms**

*GHS02* *GHS04* *GHS07* *GHS08*

**Signal Word** ***Danger***

**Hazard Statements**

*H222* : *Extremely flammable aerosol*
*H280* : *Contains gas under pressure; may explode if heated*
*H319* : *Causes serious eye irritation*
*H336* : *May cause drowsiness or dizziness*
*H361* : *Suspected of damaging fertility or the unborn child*
*H370* : *Causes damage to organs*

| | | | |
|---|---|---|---|
| | *H373* | : | *May cause damage to organs through prolonged or repeated exposure* |
| | *H402* | : | *Harmful to aquatic life* |
| **Precautionary Statements** | *P202* | : | *Do not handle until all safety precautions have been read and understood.* |
| | *P210* | : | *Keep away from heat/sparks/open flames/hot surfaces. - No smoking.* |
| | *P211* | : | *Do not spray on an open flame or other ignition source.* |
| | *P251* | : | *Pressurized container: Do not pierce or burn, even after use.* |
| | *P260* | : | *Do not breathe spray.* |
| | *P264* | : | *Wash hands thoroughly after handling.* |
| | *P270* | : | *Do not eat, drink or smoke when using this product.* |
| | *P271* | : | *Use only outdoors or in a well-ventilated area.* |
| | *P273* | : | *Avoid release to the environment.* |
| | *P280* | : | *Wear protective gloves and eye protection.* |
| | *P304+P340* | : | *If inhaled: Remove person to fresh air and keep comfortable for breathing* |
| | *P305+P351+P338* | : | *If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing* |
| | *P308+P313* | : | *If exposed or concerned: Get medical advice/attention.* |
| | *P312* | : | *Call doctor if you feel unwell* |
| | *P337+P313* | : | *If eye irritation persists: Get medical advice/attention.* |
| | *P403* | : | *Store in a well-ventilated place.* |
| | *P410+P412* | : | *Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.* |
| | *P501* | : | *Dispose of contents/container to local regulations* |

### 2.3 Other Hazards Which Do Not Result In Classification

**Hazards Not Otherwise Classified** : *None Identified.*

### 2.4 Unknown acute toxicity

*51% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)*
*51% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)*
*18% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))*

## SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 Substance / Mixture

**Substance / Mixture** : *Mixture*

### 3.2 Composition

| Substance name | CAS Number | % wt* | Classification |
|---|---|---|---|
| *Dimethyl Ether* | *115-10-6* | *30 - 60* | *Flam. Gas 1, H220*<br>*Press. Gas (Diss.), H280* |
| *Acetone* | *67-64-1* | *10 - 30* | *Flam. Liq. 2, H225*<br>*Eye Irrit. 2A, H319*<br>*STOT SE 3, H336* |
| *N-Butyl Acetate* | *123-86-4* | *10 - 30* | *Flam. Liq. 2, H225*<br>*STOT SE 3, H336*<br>*Aquatic Acute 3, H402* |
| *Propylene Glycol Monomethyl Ether Acetate* | *108-65-6* | *5 - 10* | *Flam. Liq. 3, H226* |
| *Toluene* | *108-88-3* | *5 - 10* | *Flam. Liq. 2, H225*<br>*Skin Irrit. 2, H315*<br>*Repr. 2, H361*<br>*STOT SE 3, H336*<br>*STOT RE 2, H373*<br>*Asp. Tox. 1, H304*<br>*Aquatic Acute 2, H401* |
| *Methyl Acetate* | *79-20-9* | *1 - 5* | *Flam. Liq. 2, H225*<br>*Eye Irrit. 2A, H319*<br>*STOT SE 3, H336* |

| Substance name | CAS Number | % wt* | Classification |
|---|---|---|---|
| *Methanol* | *67-56-1* | *1 - 5* | *Flam. Liq. 2, H225*<br>*Acute Tox. 3 (Oral), H301*<br>*Acute Tox. 3 (Dermal), H311*<br>*Acute Tox. 3 (Inhalation:vapour), H331*<br>*STOT SE 1, H370* |

*Full text of hazard classes and H-statements : see section 16*

**Chemical name, CAS number and/or exact concentration have been withheld as a trade secret*

## SECTION 4 - FIRST-AID MEASURES

### 4.1 Description of First-Aid Measures

**General Measures** : *If exposed or concerned: Get medical advice/attention.*

**Inhalation** : *Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist or if unconscious.*

**Skin Contact** : *Remove with soap and water, rinsing and repeating for 15 minutes. Use skin cream to counter any resulting dryness. Consult a physician if irritation continues. If large skin area is affected, remove contaminated clothing. . Wash skin with plenty of water.*

**Eye Contact** : *Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.*

**Ingestion** : *Do not induce vomiting! Immediatley have the victim drink plenty of water. Do not give milk or digestible oils Keep airways free. Contact a physician. Never give anything by mouth if victim is rapidly losing consciousness, unconscious, or convulsing. Call a poison center or a doctor if you feel unwell.*

**First-Aid Responder Protection** : *Wear adequate personal protective equipment based on the nature and severity of the emergency.*

### 4.2 Most Important Symptoms and Effects, Both Acute and Delayed

**Symptoms of Exposure** : *Eye Irritation, Nose Irritation, Throat Irritation, Dermatitis, Central Nervous System Depression, Confusion, Skin Irritation, Headache, Dizziness, Nausea, Narcosis, Upper Respiratory Tract Irritation, Drowsiness, Vomiting, Optical Nerve Damage, Chest Tightness.*

**Delayed Effects** : *No known delayed effects.*

**Immediate Effects** : *No known immediate effects.*

**Chronic Effects** : *Methyl alcohol may be fatal or cause blindness if swallowed. Because of defatting properties, repeated skin contact can cause skin damage such as chap, dermatitis, inflammation and the formation of eczema.*

**Target Organs** : *Central Nervous System, Eyes, Gastrointestinal Tract, Liver, Reproductive System, Respiratory System, Skin, Kidneys.*

### 4.3 Indication of Immediate Medical Attention and Special Treatment

**Notes to Physician** : *Treat symptomatically.*

**Specific Treatments/Antidotes** : *No Information Available.*

**Medical Conditions Aggravated** : *May aggravate personnel with pre-existing disorders associated with any of the Target Organs.*

## SECTION 5 - FIRE-FIGHTING MEASURES

### 5.1 Suitable Extinguishing Media

**Extinguishing Media** : *Water, carbon dioxide, dry chemical, universal aqueous film forming foam.*

**Unsuitable Media** : *Water jet.*

### 5.2 Specific Hazards Arising from the Chemical or Mixture

**Hazardous Combustion Products** : *Decomposition products may include: oxides of carbon, smoke, vapors. See also Section 10.6.*

**Specific Hazards During Firefighting** : *Extremely flammable. In a fire or if heated, a pressure increase will occur which may result in container bursting. Vapors heavier than air may spread along the ground and travel to an ignition source.*

### 5.3 Special Protective Actions for Fire-Fighters

**Firefighting Instructions** : *Use water spray to cool fire exposed aerosol containers, as contents can rupture violently from heat developed pressure.*

**Protection during Firefighting** : *Firemen should wear self-contained breathing apparatus with full face-piece operated in positive pressure mode.*

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures

**For Non-Emergency Personnel** : *No action should be taken involving any personnel without suitable training. Evacuate surrounding areas. Do not touch or walk through spill. Remove ignition sources and provide adequate ventilation only if it is safe to do so.*

**For Emergency Personnel** : *Use personal protection as recommended in Section 8.*

### 6.2 Environmental Precautions

**Environmental Precautions** : *Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.*

### 6.3 Methods and Materials for Containment and Cleaning up

**Containment Procedures** : *Product is an aerosol, therefore spills and leaks are unlikely. In case of rupture, released content may be contained with oil/solvent absorbent pads, socks, and/or absorbents.*

**Cleanup Procedures** : *Spills from aerosol cans are unlikely and are generally of small volume. Large spills are therefore not normally considered a problem. In case of actual rupture, avoid breathing vapors and ventilate area well.*

**Other Information** : *Aerosol products represent a limited hazard and will not spill or leak unless ruptured. In case of rupture contents are generally evacuated from the can rapidly. Area should be ventilated immediately and continuous ventilation provided until all fumes and vapors have been removed. Aerosol cans should never be incinerated or burned.*

**Prohibited Materials** : *Combustible absorbent material such as sawdust. Use of equipment that may cause sparking.*

## SECTION 7 - HANDLING AND STORAGE

### 7.1 Precautions for Safe Handling

**General Handling Precautions** : *KEEP OUT OF THE REACH OF CHILDREN. Avoid prolonged or repeated skin contact. Avoid breathing of vapors. Do not incinerate (burn) containers. Always replace overcap when not in use. Avoid use around open flames or other sources of ignition. Exposure to heat or prolonged exposure to sun may cause can to burst. Use only with adequate ventilation, opening doors or windows to achieve cross-ventilation.*

**Hygiene Recommendations** : *Do not eat, drink or smoke when using this product. Wash hands thoroughly after use. Remove contaminated clothing and protective equipment before entering eating or smoking areas.*

### 7.2 Conditions for Safe Storage Including Any Incompatibilities

**Storage Requirements** : *Storage of individual cans should be done in an area below 55°C (120 °F), and away from heat sources. Ensure can is in a secure place to prevent knocking over and accidental rupture. For storage of pallet quantities, compliance with NFPA 30B (Manufacture and Storage of Aerosol Products) is recommended.*

**Incompatibilities** : *Segregate storage away from materials indicated in Section 10.*

**NFPA 30B Classification** : *This product is classified as a Level 2 Aerosol per NFPA 30B*

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control Parameters

| ***Dimethyl Ether (115-10-6)*** | | |
|---|---|---|
| *AIHA* | *WEEL TWA (ppm)* | *1000 ppm* |
| *Manufacturer Recommended* | *Recommended PEL (TWA) (ppm)* | *1000 ppm (Dupont AEL)* |

| ***Propylene Glycol Monomethyl Ether Acetate (108-65-6)*** | | |
|---|---|---|
| *California* | *California PEL (TWA) (mg/m3)* | *541 mg/m³* |
| *California* | *California PEL (TWA) (ppm)* | *100 ppm* |
| *California* | *California PEL (STEL) (mg/m3)* | *811 mg/m³* |
| *California* | *California PEL (STEL) (ppm)* | *150 ppm* |

| ***N-Butyl Acetate (123-86-4)*** | | |
|---|---|---|
| *ACGIH* | *ACGIH TWA (mg/m³)* | *150 ppm* |
| *ACGIH* | *ACGIH Ceiling (mg/m³)* | *200 ppm* |
| *OSHA* | *OSHA PEL (TWA) (mg/m³)* | *710 mg/m³* |
| *OSHA* | *OSHA PEL (TWA) (ppm)* | *150 ppm* |

| ***N-Butyl Acetate (123-86-4)*** | | |
|---|---|---|
| *NIOSH* | *US IDLH (ppm)* | *1700 ppm* |
| *NIOSH* | *NIOSH REL (TWA) (ppm)* | *150 ppm* |
| *NIOSH* | *NIOSH REL (STEL) (ppm)* | *200 ppm* |
| *California* | *California PEL (TWA) (mg/m3)* | *710 mg/m³* |
| *California* | *California PEL (TWA) (ppm)* | *150 ppm* |
| *California* | *California PEL (STEL) (mg/m3)* | *950 mg/m³* |
| *California* | *California PEL (STEL) (ppm)* | *200 ppm* |

| ***Toluene (108-88-3)*** | | |
|---|---|---|
| *ACGIH* | *ACGIH TWA (mg/m³)* | *20 ppm* |
| *ACGIH* | *ACGIH Ceiling (mg/m³)* | *150 ppm* |
| *OSHA* | *OSHA PEL (TWA) (ppm)* | *200 ppm* |
| *OSHA* | *OSHA PEL (Ceiling) (ppm)* | *300 ppm* |
| *NIOSH* | *US IDLH (ppm)* | *500 ppm* |
| *NIOSH* | *NIOSH REL (TWA) (ppm)* | *100 ppm* |
| *NIOSH* | *NIOSH REL (STEL) (ppm)* | *150 ppm* |
| *California* | *California PEL (TWA) (mg/m3)* | *37 mg/m³* |
| *California* | *California PEL (TWA) (ppm)* | *10 ppm* |
| *California* | *California PEL (STEL) (mg/m3)* | *560 mg/m³* |
| *California* | *California PEL (STEL) (ppm)* | *150 ppm* |
| *California* | *California PEL (Ceiling) (ppm)* | *500 ppm* |
| *Biological Exposure Index* | *Toluene in blood, Prior to last shift of workweek* | *0.02 mg/l* |
| *Biological Exposure Index* | *Toluene in urine, End of shift* | *0.03 mg/l* |
| *Biological Exposure Index* | *o-Cresol in urine (with hydrolysis), End of shift (B)* | *0.3 mg/g creatinine* |

| ***Acetone (67-64-1)*** | | |
|---|---|---|
| *ACGIH* | *ACGIH TWA (mg/m³)* | *250 ppm* |
| *ACGIH* | *ACGIH Ceiling (mg/m³)* | *500 ppm* |
| *OSHA* | *OSHA PEL (TWA) (mg/m³)* | *2400 mg/m³* |
| *OSHA* | *OSHA PEL (TWA) (ppm)* | *1000 ppm* |
| *NIOSH* | *US IDLH (ppm)* | *2500 ppm* |
| *NIOSH* | *NIOSH REL (TWA) (ppm)* | *250 ppm* |
| *California* | *California PEL (TWA) (mg/m3)* | *1200 mg/m³* |
| *California* | *California PEL (TWA) (ppm)* | *500 ppm* |
| *California* | *California PEL (STEL) (mg/m3)* | *1780 mg/m³* |
| *California* | *California PEL (STEL) (ppm)* | *750 ppm* |
| *California* | *California PEL (Ceiling) (ppm)* | *3000 ppm* |
| *Biological Exposure Index* | *Acetone in urine, End of shift (Ns)* | *25 mg/l* |

| ***Methyl Acetate (79-20-9)*** | | |
|---|---|---|
| *ACGIH* | *ACGIH TWA (mg/m³)* | *200 ppm* |
| *ACGIH* | *ACGIH Ceiling (mg/m³)* | *250 ppm* |
| *OSHA* | *OSHA PEL (TWA) (mg/m³)* | *610 mg/m³* |
| *OSHA* | *OSHA PEL (TWA) (ppm)* | *200 ppm* |
| *NIOSH* | *US IDLH (ppm)* | *3100 ppm* |
| *NIOSH* | *NIOSH REL (TWA) (mg/m³)* | *610 mg/m³* |
| *NIOSH* | *NIOSH REL (TWA) (ppm)* | *200 ppm* |
| *NIOSH* | *NIOSH REL (STEL) (mg/m³)* | *760 mg/m³* |
| *NIOSH* | *NIOSH REL (STEL) (ppm)* | *250 ppm* |
| *California* | *California PEL (TWA) (mg/m3)* | *610 mg/m³* |
| *California* | *California PEL (TWA) (ppm)* | *200 ppm* |
| *California* | *California PEL (STEL) (mg/m3)* | *760 mg/m³* |
| *California* | *California PEL (STEL) (ppm)* | *250 ppm* |

| ***Methanol (67-56-1)*** | | |
|---|---|---|
| *ACGIH* | *ACGIH TWA (mg/m³)* | *200 ppm* |
| *ACGIH* | *ACGIH Ceiling (mg/m³)* | *250 ppm* |
| *OSHA* | *OSHA PEL (TWA) (mg/m³)* | *260 mg/m³* |
| *OSHA* | *OSHA PEL (TWA) (ppm)* | *200 ppm* |
| *NIOSH* | *US IDLH (ppm)* | *6000 ppm* |
| *NIOSH* | *NIOSH REL (TWA) (ppm)* | *200 ppm* |
| *California* | *California PEL (TWA) (mg/m3)* | *260 mg/m³* |

| *Methanol (67-56-1)* | | |
|---|---|---|
| *California* | *California PEL (TWA) (ppm)* | *200 ppm* |
| *California* | *California PEL (STEL) (mg/m3)* | *325 mg/m³* |
| *California* | *California PEL (STEL) (ppm)* | *250 ppm* |
| *California* | *California PEL (Ceiling) (ppm)* | *1000 ppm* |
| *Biological Exposure Index* | *Methanol in Urine, End of shift (B,Ns)* | *15 mg/l* |

## 8.2 Exposure Controls

**Engineering Measures** : *Use only with adequate ventilation. General ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Local exhaust ventilation or an enclosed handling system may be necessary to control air contamination below that of the lowest OEL from the table above.*

**Personal Protective Equipment**

**Eye / Face Protection** : *Safety glasses with side shields are recommended as a minimum for any type of industrial chemical handling. Where eye contact with this material could occur, chemical splash proof goggles are recommended.*

**Hand Protection** : *Chemical-resistant gloves, tested according to ASTM F903 - 17.*

**Remarks** : *Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to the place of work.*

**Skin and Body Protection** : *For brief contact, no precautions other than clean body-covering clothing should be needed.*

**Respiratory Protection** : *An approved respirator with an organic vapor cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed occupational exposure limits.*

**Compliance** : *If needed, compliance with OSHA standard 29 CFR 1910.134 is necessary.*

**Other Protective Equipment** : *Safety showers and eye-wash stations should be available in the workplace near where the material will be used.*

**Environmental Exposure Controls** : *Avoid release to the environment.*

# SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Physical Properties

| | | | |
|---|---|---|---|
| Boiling Point | *> 56.00 °C* | Melting / Freezing Point | *> -108.40 °C* |
| Flash Point, Liquid | *> -17.00 °C* | Flash Point, Propellant | *-42.00 °C* |
| Explosive Limits | *LEL: 1.00 UEL: 16.00 vol %* | Autoignition Temperature, Liquid | *272.00 °C* |
| Flammability | *Extremely Flammable Aerosol* | Density | *0.838 g/cm³* |
| Molecular Weight | *Not Available* | Weight | *6.993 lbs/gal* |
| Vapor Pressure | *Not Available* | pH | *Not Available* |
| Vapor Density | *Not Available* | Evaporation Rate (nBAc=1) | *Not Available* |
| Viscosity | *Not Available* | Partition Coefficient (Log Pow) | *Not Available* |
| Odor Threshold | *Not Available* | Refractive Index | *Not Available* |
| Physical State | *Pressurized Product* | Heat Of Combustion | *9944.33 BTU/lb* |
| Appearance / Color | *Silver* | Water Solubility | *Not Available* |
| Odor | *Paint-like* | Decomposition Temperature | *Not Available* |

## 9.2 Environmental Properties

| | | | |
|---|---|---|---|
| Percent Volatile | *82.00 % wt* | VOC Regulatory | *654.35 g/L (5.46 lbs/gal)* |
| Percent VOC | *64.00 % wt* | VOC Actual | *536.32 g/L (4.48 lbs/gal)* |
| Percent HAP | *9.50 % wt* | HAP Content | *79.61 g/L (0.66 lbs/gal)* |
| Global Warming Potential | *0.69 GWP* | Maximum Incremental Reactivity | *0.9040 g O3/g* |
| Ozone Depletion Potential | *0.00 ODP* | | |

# SECTION 10 - STABILITY AND REACTIVITY

## 10.1 Reactivity

**Reactivity** : *No specific test data related to reactivity is available for this products or its ingredients.*

## 10.2 Chemical Stability

**Chemical Stability** : *This product is stable.*

## 10.3 Possibility of Hazardous Reactions

**Hazardous Reactions** : *Under normal conditions of storage and use, hazardous reactions are not expected to occur.*

## 10.4 Conditions to Avoid

**Conditions to Avoid** : *Electrostatic Discharge, Other Ignition Sources, Temperatures above 140°F (60°C), Hot Surfaces, Heat, Flames, Sparks.*

## 10.5 Incompatible Materials

**Materials to Avoid** : *Strong Oxidizing Agents, Strong Reducing Agents, Alkali Metals, Strong Acids, Potassium t-Butoxide, Hydrogen Peroxide, Potassium Chlorate.*

## 10.6 Hazardous Decomposition Products

**Thermal Decomposition** : *Oxides of carbon, Aldehydes, Formaldehyde, Methanol, Acetic Acid.*

# SECTION 11 - TOXICOLOGICAL INFORMATION

## 11.1 Information on Toxicological Effects

| ***Dimethyl Ether (CAS: 115-10-6 / EC: 204-065-8)*** | |
|---|---|
| *LC50 Inhalation (Rat)* | *164000 ppm/4h (RTECS)* |

| ***Propylene Glycol Monomethyl Ether Acetate (CAS: 108-65-6 / EC: 203-603-9)*** | |
|---|---|
| *LD50 Oral (Rat)* | *10000 mg/kg (ChemInfo)* |
| *LD50 Dermal (Rabbit)* | *19200 mg/kg (ChemInfo)* |
| *LC50 Inhalation (Rat)* | *> 5250 ppm/4h (ChemInfo)* |

| ***N-Butyl Acetate (CAS: 123-86-4 / EC: 204-658-1)*** | |
|---|---|
| *LD50 Oral (Rat)* | *13100 mg/kg (IUCLID)* |
| *LD50 Dermal (Rabbit)* | *> 14100 mg/kg (IUCLID)* |
| *LC50 Inhalation (Rat)* | *> 21 mg/l/4h (IUCLID)* |
| *LC50 Inhalation (Rat)* | *390 ppm/4h (RTECS)* |

| ***Toluene (CAS: 108-88-3 / EC: 203-625-9)*** | |
|---|---|
| *LD50 Oral (Rat)* | *> 2000 mg/kg (Lit.)* |
| *LD50 Dermal (Rabbit)* | *12124 mg/kg (IUCLID)* |
| *LC50 Inhalation (Rat)* | *> 20 mg/l/4h (Lit.)* |

| ***Acetone (CAS: 67-64-1 / EC: 200-662-2)*** | |
|---|---|
| *LD50 Oral (Rat)* | *5800 mg/kg (Sigma-Aldrich)* |
| *LD50 Dermal (Rabbit)* | *20000 mg/kg (IUCLID)* |
| *LC50 Inhalation (Rat)* | *76 mg/l/4h (GESTIS Substance Database)* |

| ***Methyl Acetate (CAS: 79-20-9 / EC: 201-185-2)*** | |
|---|---|
| *LD50 Oral (Rat)* | *6970 mg/kg (Lit.)* |
| *LD50 Dermal (Rabbit)* | *> 5000 mg/kg (RTECS)* |
| *LC50 Inhalation (Rat)* | *> 49.28 mg/l/4h (External SDS)* |
| *LC50 Inhalation (Rat)* | *16000 - 32000 (ChemInfo)* |

| ***Methanol (CAS: 67-56-1 / EC: 200-659-6)*** | |
|---|---|
| *LD50 Oral (Rat)* | *5850 mg/kg (ChemInfo)* |
| *LD50 Dermal (Rabbit)* | *15800 mg/kg (RTECS)* |
| *LC50 Inhalation (Rat)* | *131.25 mg/l/4h (ECHA)* |
| *LC50 Inhalation (Rat)* | *64000 ppm/4h (ChemInfo)* |

**Routes Of Exposure** : *Eye Contact, Ingestion, Skin Contact, Inhalation, Skin Absorption.*

**Delayed and Immediate Effects and Also Chronic Effects from Short and Long Term Exposure** : *See Section 4.2*

**Skin Corrosion/Irritation** : *Not classified*

**Eye Damage/Irritation** : *Causes serious eye irritation.*

| | | |
|---|---|---|
| **Respiratory or Skin Sensitization** | : | *Not classified* |
| **Germ Cell Mutagenicity** | : | *Not classified* |
| **Reproductive Toxicity** | : | *Suspected of damaging fertility or the unborn child.* |
| **STOT-Single Exposure** | : | *Causes damage to organs. May cause drowsiness or dizziness.* |
| **STOT-Repeated Exposure** | : | *May cause damage to organs through prolonged or repeated exposure.* |
| **Aspiration Hazard** | : | *Not classified* |
| **Vaporizer** | : | *Aerosol* |
| **Carcinogen Data** | : | *None of the ingredients in the product are listed with OSHA, IARC, NTP or ACGIH as being a suspected or known carcinogen in a concentration greater than 0.1% by weight.* |

## SECTION 12 - ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity and Ecological Properties

| ***Dimethyl Ether (115-10-6)*** | |
|---|---|
| *Persistence and Degradibility* | *Biodegradability 7% / 28 days.* |
| *Log Pow* | *0.1 (Experimental value; 0.07; QSAR; KOWWIN; 25 °C)* |
| *Bioacculative Potential* | *Low potential for bioaccumulation (Log Kow < 4).* |

| ***Propylene Glycol Monomethyl Ether Acetate (108-65-6)*** | |
|---|---|
| *LC50 Fish* | *100 ml/l Rainbow Trout - 96hr* |
| *EC50 Daphnia* | *373 mg/l Water Flea - 48hr* |
| *EC50 Daphnia* | *> 1000 mg/l Green Algae - 96hr* |
| *Persistence and Degradibility* | *Biodegradability 81% / 28 days.* |
| *Biochemical Oxygen Demand* | *330 mg/g* |
| *Chemical Oxygen Demand* | *1740 mg/g* |
| *Theoretical Oxygen Demand* | *1820 mg/g* |
| *Log Pow* | *0.56* |
| *Log Koc* | *0.36* |

| ***n-Butyl Acetate (123-86-4)*** | |
|---|---|
| *LC50 Fish* | *62 mg/l Golden Orfe - 96hr* |
| *LC50 Fish* | *18 mg/l Fathead Minnow - 96h* |
| *EC50 Daphnia* | *72.8 mg/l Water Flea - 24hr* |
| *EC50 Other Aquatic Organisms* | *675 mg/l Green Algae - 72hr* |
| *EC50 Other Aquatic Organisms* | *959 mg/l Bacteria - 18hr* |
| *Persistence and Degradibility* | *Biodegradability 88% / 28 days.* |
| *Biochemical Oxygen Demand* | *520 mg/g* |
| *Chemical Oxygen Demand* | *2320 mg/g* |
| *Theoretical Oxygen Demand* | *2207 mg/g* |
| *Log Pow* | *1.804* |
| *Log Koc* | *2.35* |

| ***Toluene (108-88-3)*** | |
|---|---|
| *LC50 Fish* | *5.8 mg/l Rainbow Trout - 96hr* |
| *LC50 Other Aquatic Organisms* | *10 mg/l Green Algae - 72hr* |
| *EC50 Daphnia* | *6 mg/l Water Flea - 48hr* |
| *Persistence and Degradibility* | *Readily biodegradable in water. Biodegradable in the soil. Low potential for absorption in soil.* |
| *Biochemical Oxygen Demand* | *2.15 g $O_2$/g substance* |
| *Chemical Oxygen Demand* | *2.52 g $O_2$/g substance* |
| *Theoretical Oxygen Demand* | *3.13 g $O_2$/g substance* |
| *Biodegration* | *86 % 28 Days* |
| *Log Pow* | *2.73 (Experimental Value)* |
| *Bioacculative Potential* | *Low potential for bioaccumulation (BCF < 500).* |
| *Log Koc* | *2.15* |

| ***Acetone (67-64-1)*** | |
|---|---|
| *LC50 Fish* | *5540 mg/l Rainbow Trout - 96hr* |
| *LC50 Fish* | *8300 mg/l Bluegill Sunfish - 96h* |
| *EC50 Daphnia* | *8800 mg/l Water Flea - 48hr* |
| *Persistence and Degradibility* | *Biodegradability 90% / 28 days.* |

| ***Acetone (67-64-1)*** | |
|---|---|
| *Biochemical Oxygen Demand* | *1.43 g $O_2$/g substance* |
| *Chemical Oxygen Demand* | *1.92 g $O_2$/g substance* |
| *Theoretical Oxygen Demand* | *2.2 g $O_2$/g substance* |
| *BCF Fish* | *0.69* |
| *BCF Other Aquatic Organisms* | *3* |
| *Log Pow* | *-0.24* |

| ***Methyl Acetate (79-20-9)*** | |
|---|---|
| *LC50 Fish* | *250 - 350 mg/l Zebra Fish - 96hr* |
| *EC50 Daphnia* | *1026.7 mg/l Water Flea - 48hr* |
| *EC50 Other Aquatic Organisms* | *> 120 mg/l Green Algae - 72hr* |
| *EC50 Other Aquatic Organisms* | *6100 mg/l Bacteria - 30min* |
| *Persistence and Degradibility* | *Readily biodegradable in water. Inherently biodegradable. Highly mobile in soil.* |
| *Chemical Oxygen Demand* | *1511.8 mg/g* |
| *Theoretical Oxygen Demand* | *1510 mg/g* |
| *Biodegration* | *70 % 28 Days* |
| *BCF Fish* | *< 1 (BCF)* |
| *Log Pow* | *0.18* |
| *Bioacculative Potential* | *Low potential for bioaccumulation (BCF < 500).* |
| *Log Koc* | *0.68* |

| ***Methanol (67-56-1)*** | |
|---|---|
| *LC50 Fish* | *15400 mg/l Bluegill Sunfish - 96h* |
| *EC50 Daphnia* | *> 10000 mg/l Water Flea - 48hr* |
| *EC50 Other Aquatic Organisms* | *22000 mg/l Freshwater Algae - 96hr* |
| *Persistence and Degradibility* | *Biodegradability 72% / 5 days.* |
| *Biochemical Oxygen Demand* | *0.6 - 1.12 g $O_2$/g substance* |
| *Chemical Oxygen Demand* | *1.42 g $O_2$/g substance* |
| *Theoretical Oxygen Demand* | *1.5 g $O_2$/g substance* |
| *BCF Fish* | *< 10 (BCF; 72 h; Leuciscus idus)* |
| *Log Pow* | *-0.77 (Experimental value; Other)* |
| *Bioacculative Potential* | *Low potential for bioaccumulation (BCF < 500).* |
| *Log Koc* | *0.44* |

## SECTION 13 - DISPOSAL CONSIDERATIONS

### 13.1 Waste Treatment Methods

**Waste Disposal** : *Characteristics and waste stream classification can change with product use and location. It is the responsibility of the user to determine the proper storage, transportation, treatment, and/or disposal methodologies for spent materials and residues at the time of disposition. It is the responsibility of the user to determine the proper storage, transportation, treatment, and/or disposal methodologies for spent materials and residues at the time of disposition. All waste must be disposed of in compliance with the respective national, federal, state, and/or local regulations.*

**Waste Disposal Of Packaging** : *In the United States, an aerosol container that does not contain a significant amount of liquid would meet the definition of scrap metal (40 CFR 261.1(c)(6)), and would be exempt from RCRA regulation under 40 CFR 261.6(a)(3)(iv) if it is to be recycled. If containers are to be disposed of (not recycled) it must be managed under all applicable RCRA and state regulations.*

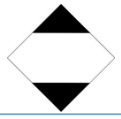
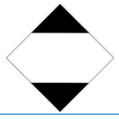
**Landfill Precautions** : *Not Available.*

**Incineration Precautions** : *** DO NOT INCINERATE ** CONTENTS UNDER PRESSURE **.*

## SECTION 14 - TRANSPORTATION INFORMATION

| 14.1 UN Number | | DOT (USA) | IATA (AIR) | IMDG (OCEAN) |
|---|---|---|---|---|
| **UN Number** | : | *UN1950* | *UN1950* | *UN1950* |

| 14.2 UN Proper Shipping Name | | DOT (USA) | IATA (AIR) | IMDG (OCEAN) |
|---|---|---|---|---|
| **UN Proper Shipping Name** | : | *Aerosols, Limited Quantity* | *Aerosols, Flammable, Limited Quantity* | *Aerosols, Limited Quantity* |

| 14.3 Transport Hazard Class(es) | | DOT (USA) | IATA (AIR) | IMDG (OCEAN) |
|---|---|---|---|---|
| **Transport Hazard Class(es)** | : | *2.1* | *2.1* | *2.1* |
| **Labels** | : | *None* | *2.1 - Flammable gas*  | *None* |
| **Limited Quantity** | : | *Yes*  | *Yes*  | *Yes*  |
| **EmS Code** | : | *Not Applicable* | *Not Applicable* | *F-D, S-U* |

| 14.4 Packing Group | | DOT (USA) | IATA (AIR) | IMDG (OCEAN) |
|---|---|---|---|---|
| **Packing Group** | : | *None* | *None* | *None* |

| 14.5 Environmental Hazards | | DOT (USA) | IATA (AIR) | IMDG (OCEAN) |
|---|---|---|---|---|
| **Marine Pollutant** | : | *No* | *No* | *No* |

### 14.6 Special Precautions

**Precautions** : *None Identified*

### 14.7 Transport in Bulk

**Remarks** : *Not applicable for product as supplied*

## SECTION 15 - REGULATORY INFORMATION

### 15.1 Federal Regulations

**SARA Section 313** : *Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.*

| | | |
|---|---|---|
| *Toluene* | *CAS-No. 108-88-3* | *5 - 10%* |
| *Methanol* | *CAS-No. 67-56-1* | *1 - 5%* |

**TSCA Section 12(b)** : *This product or mixture is not known to contain a chemical or chemicals subject to the export notification requirements of section 12(b) of the Toxic Substances Control Act (TSCA) and 40 CFR Part 707, subpart D*

**CERCLA Reportable Quantity** : *Chemical(s) subject to reporting requirements of Section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) if released to the environment at or above the reportable quantity*

| | | |
|---|---|---|
| *Toluene* | *CAS-No. 108-88-3* | *1000 lb* |
| *Acetone* | *CAS-No. 67-64-1* | *5000 lb* |
| *Methanol* | *CAS-No. 67-56-1* | *5000 lb* |

**SARA Section 311/312 Hazard Classes** : *Delayed (chronic) health hazard, Fire hazard, Immediate (acute) health hazard.*

**TSCA Inventory (United States)** : *All chemical substances in this product are either listed on the Toxic Substances Control Act (TSCA) Inventory or are in compliance with a TSCA Inventory exemption.*

### 15.2 State Regulations

**California Proposition 65** : *This product contains chemicals known to the State of California to cause birth defects or other reproductive harm.*

| | | | |
|---|---|---|---|
| *Toluene (108-88-3)* | *Developmental Toxicity* | *Yes* | *7.5 %* |
| *Methanol (67-56-1)* | *Developmental Toxicity* | *Yes* | *2.0 %* |
| *Toluene (108-88-3)* | *No significance risk level (NSRL)* | *7000 µg/day* | |

**State Right-to-Know Lists** : *The following chemical(s) appear on one or more state RTK (Right to Know) lists as indicated*

| | |
|---|---|
| *Dimethyl Ether (115-10-6)* | *U.S. - New Jersey - Right to Know Hazardous Substance List* |

| | |
|---|---|
| *Toluene (108-88-3)* | *U.S. - Massachusetts - Right To Know List*<br>*U.S. - New Jersey - Right to Know Hazardous Substance List*<br>*U.S. - Pennsylvania - RTK (Right to Know) List* |
| *Acetone (67-64-1)* | *U.S. - Massachusetts - Right To Know List*<br>*U.S. - New Jersey - Right to Know Hazardous Substance List*<br>*U.S. - Pennsylvania - RTK (Right to Know) List* |
| *Methyl Acetate (79-20-9)* | *U.S. - New Jersey - Right to Know Hazardous Substance List* |
| *Methanol (67-56-1)* | *U.S. - New Jersey - Right to Know Hazardous Substance List*<br>*U.S. - Pennsylvania - RTK (Right to Know) List* |

## SECTION 16 - OTHER INFORMATION

**Indication of changes** :

| *Section* | *Changed item* | *Change* |
|---|---|---|
| 1 | Supersedes | Added |
| 1 | SDS US Regulation reference | Added |
| 1 | Revision date | Modified |
| 1 | Date of issue | Modified |
| 2.1 | GHS-US classification | Modified |
| 2.2 | Precautionary statements (GHS-US) | Modified |
| 2.2 | Hazard statements (GHS-US) | Modified |
| 3 | Composition/Information on ingredients | Modified |
| 4.1 | First-aid measures after skin contact | Modified |
| 4.1 | First-aid measures after ingestion | Modified |
| 7.2 | NFPA 30B Classification | Modified |
| 8.2 | Compliance | Added |
| 8.2 | Remarks | Added |
| 8.2 | Hand Protection | Added |
| 8.2 | Environmental Exposure Controls | Added |
| 8.2 | Respiratory Protection | Added |
| 9 | Explosive properties | Added |
| 9 | Relative vapor density at 20 °C | Added |
| 9 | Appearance | Added |
| 9 | Melting point | Modified |
| 9 | Flash point | Modified |
| 9 | Boiling point | Modified |
| 9 | Auto-ignition temperature | Modified |
| 10 | Reactivity | Modified |
| 12.1 | Ecology - general | Modified |
| 14 | User Precautions | Added |
| 14 | EmS Code (Column 15 in IMDG Book 2) | Added |

**Full Text of H-Statements** :

| *H Code* | *H Phrase* |
|---|---|
| *H220* | *Extremely flammable gas* |
| *H225* | *Highly flammable liquid and vapour* |
| *H226* | *Flammable liquid and vapour* |
| *H280* | *Contains gas under pressure; may explode if heated* |
| *H301* | *Toxic if swallowed* |
| *H304* | *May be fatal if swallowed and enters airways* |
| *H311* | *Toxic in contact with skin* |
| *H315* | *Causes skin irritation* |
| *H319* | *Causes serious eye irritation* |
| *H331* | *Toxic if inhaled* |
| *H336* | *May cause drowsiness or dizziness* |
| *H361* | *Suspected of damaging fertility or the unborn child* |
| *H370* | *Causes damage to organs* |
| *H373* | *May cause damage to organs through prolonged or repeated exposure* |
| *H401* | *Toxic to aquatic life* |
| *H402* | *Harmful to aquatic life* |