

MATERIAL SAFETY DATA SHEET



Date Issued: 11/29/2007
MSDS No: 3178
Revision No: New MSDS

G-4 SOLVENT

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: G-4 SOLVENT
PRODUCT CODE: 3178

MANUFACTURER

Tarr Acquisition, LLC
4115 W. Turney Ave.
Phoenix AZ 85019

Service Number: 602-233-2000

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (US Transportation) :(800) 424 - 9300
CANUTEC (Canadian Transportation) :(613) 996 - 6666

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: DANGER! Flammable liquid and vapor. Harmful or fatal if swallowed. Vapors are heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger. Can cause severe lung damage and may be fatal if swallowed. Causes eye and skin irritation or injury. May be harmful if swallowed. May cause CNS depression.

POTENTIAL HEALTH EFFECTS

EYES: Material is a severe eye irritant. Symptoms include stinging or burning, tearing, redness, swelling and visual disturbances.

SKIN: May cause skin irritation or sensitivity. Symptoms include redness, drying and cracking of the skin, swelling and dermatitis.

INGESTION: Liquid is moderately toxic and may be harmful if swallowed. Ingestion of product may result in vomiting; aspiration (breathing) of vomitus into the lungs must be avoided as even small quantities may result in aspir. pneumonitis. Serious lung damage and possibly fatal chemical pneumonia (chemical pneumonitis) can develop if this occurs. May cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. May cause gastric upset. Significant exposure may result in unconsciousness and death.

INHALATION: Breathing of high vapor concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death. Vapors expected to be slightly irritating. Prolonged and repeated exposures to high concentrations may cause hearing loss. Chronic hydrocarbon abuse (for example, sniffing glue or light hydrocarbons such as contained in this material) has been associated with irregular heart rhythms and potential cardiac arrest.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

INHALATION: Effects from vapors or spray mists in poorly ventilated areas may include irritation of the mucus membranes. Inhalation of vapors or spray mists may also result in nausea, dizziness, breathing difficulty, headaches, and loss of coordination.

ACUTE TOXICITY: Early to moderate CNS depression may be evidenced by giddiness, headache, dizziness, and nausea; in extreme cases, unconsciousness and death may occur. Aspiration pneumonitis may be evidenced by coughing, labored breathing and cyanosis.

CHRONIC EFFECTS: Preexisting eye, skin and respiratory disorders may be aggravated by exposure to this product. Impaired function from preexisting disorders may be aggravated by exposure to this product. The following organs and/or organ systems may be damaged by overexposure to the material. Heart, kidney, liver, auditory system. In severe cases death may result.

CARCINOGENICITY: Toluene is not known to be mutagenic or carcinogenic. However, the available human and experimental data are limited and insufficient to assess carcinogenic potential. Toluene is not listed as a carcinogen by NTP, IARC, or OSHA. Intentional abuse of toluene vapors has been linked to damage of brain, liver, kidney and to death. Many case studies involving abuse during pregnancy clearly indicate that toluene is a developmental toxicant. Developmental toxic effects comparable to those observed in humans have been seen in lab animals but the effects were generally associated with maternal toxicity.

MEDICAL CONDITIONS AGGRAVATED: Preexisting eye, skin and respiratory disorders may be aggravated by exposure to this product. Impaired function from preexisting disorders may be aggravated by exposure to this product. The following organs and/or organ systems may be aggravated and/or damaged by overexposure to the material. Heart, kidney, liver, auditory system. In severe cases death may result.

ROUTES OF ENTRY: Inhalation, skin absorption, skin contact, eye contact.

TARGET ORGAN STATEMENT: Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects; mild, reversible kidney effects; nasal damage.

SENSITIZATION: While there is no evidence that industrially acceptable levels of toluene vapors (e.g., the TLV) have produced cardiac effects in humans, animal studies have shown that inhalation of high levels of toluene produced cardiac sensitization. Such sensitization may cause fatal changes in heart rhythms. This latter effect was shown to be enhanced by hypoxia or the injection of adrenalinlike agents. Prolonged and repeated exposures to high concentrations of toluene have resulted in hearing loss in laboratory rats. While the effect of solvents on the human auditory system is uncertain, solvent abusers exposed to high doses of toluene show signs of hearing loss, and occupational exposure to toluene may interact with noise in causing hearing loss in the work environment. The effects of solvents on human hearing are uncertain. Solvent abusers and noise interaction with toluene in the work environment may cause signs of hearing loss.

COMMENTS HEALTH: Light hydrocarbons like this one have been associated with cardiac sensitization in abuser situations. Hypoxia or the injection of adrenaline-like substances enhances these effects. Refer to Health Effects Section.

HEALTH HAZARDS: Light hydrocarbons like this one have been associated with cardiac sensitization in abuser situations. Hypoxia or the injection of adrenaline-like substances enhances these effects.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name | Wt. % | CAS |
|----------------------------|-----------|-------------|
| 2- Butoxyethanol | 19 - 21 | 111-76-2 |
| Xylenes (o-,m-,p- isomers) | 64 - 73 | 001330-20-7 |
| Ethyl benzene | 8 - 15.5 | 000100-41-4 |
| Benzene, methyl- | 0 - 0.41 | 000108-88-3 |
| Benzene | 0 - 0.009 | 71-43-2 |

COMMENTS: Xylene contains the following constituents: ethyl benzene (CAS 100-41-4), toluene (CAS 108-88-3), benzene (CAS 71-43-2).

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Rest eyes for 30 minutes. If redness, burning, blurred vision or swelling persist, contact a physician.

SKIN: Remove contaminated clothing/shoes. Wipe off excess material from exposed area. Flush with large amounts of water for at least 15 minutes, by the clock, and follow by washing with soap, if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment. Do not reuse clothing until cleaned.

INGESTION: If swallowed, DO NOT INDUCE vomiting. If conscious, have victim rinse mouth out with water, then drink sips of water to remove taste from mouth. DO NOT GIVE LIQUIDS TO A DROWSY, CONVULSING OR UNCONSCIOUS PERSON. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Transport to nearest medical facility for additional treatment.

INHALATION: DO NOT attempt to rescue the victim unless proper respiratory protection is worn. Move victim to fresh air. If the victim has difficulty breathing or tightness of the chest, is dizzy, vomiting or unresponsive, 100% oxygen with rescue breathing or CPR should be administered by qualified personnel. Seek medical attention immediately.

NOTES TO PHYSICIAN: Consult a Poison Control Center for guidance. Ingestion may cause coma, metabolic acidosis, and hemoglobinuria. If more than 2.0 mL/kg has been ingested, vomiting should be induced with supervision. If symptoms such as loss of gag reflex, convulsions or unconsciousness occur before vomiting, gastric lavage with a cuffed endotracheal tube should be considered. If pain, blinking, tears, or redness continue, patient should contact ophthalmologist.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: 21°C (70°F) to 67°C (154°F) TAG CC

FLAMMABLE LIMITS: 0% to 10.6%

AUTOIGNITION TEMPERATURE: (810°F) to (986°F)

Notes: Figures are for xylene, the major component in this blend.

GENERAL HAZARD: Carbon monoxide may be evolved if incomplete combustion occurs. The vapor is heavier than air, spreads along the ground and distant ignition is possible.

EXTINGUISHING MEDIA: Use "alcohol foam", CO₂ (carbon dioxide), dry chemical or water fog. Do NOT discharge extinguishing waters into the aquatic environment.

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide and unidentified organic compounds may be formed during combustion.

EXPLOSION HAZARDS: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, and open flames. Closed containers may explode when exposed to extreme heat. Do not apply on hot surfaces, toxic gases may form when product is contacted by flame or hot surfaces.

FIRE FIGHTING PROCEDURES: WARNING! Flammable Liquid. Vapors are heavier than air. Clear fire area of unprotected personnel. Fire fighters should wear self contained breathing apparatus. Water spray may be ineffective. Water spray may be used to cool closed containers to prevent pressure build-up and possible rupture of containers. Water fog is preferred.

FIRE FIGHTING EQUIPMENT: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

6. ACCIDENTAL RELEASE MEASURES

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Keep material out of storm sewers and ditches which lead to waterways.

GENERAL PROCEDURES: WARNING. Flammable. Ventilate area of leak or spill. Remove all sources of ignition. Clean-up personnel require protective clothing and respiratory protection from vapors. Only specially trained or qualified personnel should handle the emergency.

COMMENTS: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Keep away from heat, sparks, and flame. Surfaces that are hot may ignite even liquid product in the absence of sparks or flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors are gone. Glycol ethers can be peroxide formers.

HANDLING: Do not taste or swallow. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep away from heat, sparks, and flame. Surfaces that are hot may ignite even liquid product in the absence of sparks or flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors are gone.

STORAGE: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

COMMENTS: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks static electricity, or other sources of ignition; they may explode and cause

injury or death.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

| OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200) | | | | | | | |
|---|------|----------------------|-----------------------|----------------------|-----------------------|--------------|-------------------|
| | | EXPOSURE LIMITS | | | | | |
| | | OSHA PEL | | ACGIH TLV | | Supplier OEL | |
| Chemical Name | | ppm | mg/m ³ | ppm | mg/m ³ | ppm | mg/m ³ |
| 2- Butoxyethanol | TWA | 50(S) ^[1] | 240(S) ^[1] | 20(S) ^[2] | 121(S) ^[2] | NL | NL |
| | STEL | NL | NL | NL | NL | NL | NL |
| Xylenes (o-,m-,p- isomers) | TWA | 100 | 435 | 100 | 434 | | |
| | STEL | | | 150 | 651 | | |
| Ethyl benzene | TWA | 100 | 435 | 100 | 434 | | |
| | STEL | | | 125 | 543 | | |
| Benzene, methyl- | TWA | 200 | | 50 ^[2] | 188 ^[2] | | |
| | STEL | 300 ^[3] | ^[3] | | | | |
| Benzene | TWA | 1 % ^[4] | ^[4] | 5 % | | | |
| OSHA TABLE COMMENTS: 1. NL = Not Listed 2. S = Skin 3. C = Ceiling 4. Carcinogen | | | | | | | |

ENGINEERING CONTROLS: Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapor.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Use chemical safety goggles and/or full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work areas.

SKIN: Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

RESPIRATORY: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for organic gases and vapors (boiling point greater than 65 degrees C (149 degrees F)). Where air-filtering respirators are unsuitable (e.g. airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.

PROTECTIVE CLOTHING: Where splashing is possible, full chemically resistant protective clothing (e.g., acid suit) and boots are required.

WORK HYGIENIC PRACTICES: Use good personal hygiene when handling this product. Wash hands after use, before eating, drinking, smoking, or using the toilet.

OTHER USE PRECAUTIONS: May be harmful or fatal if swallowed. May irritate body tissues. Use with adequate ventilation. Avoid breathing vapor. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

COMMENTS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Aromatic hydrocarbon odor.

APPEARANCE: Clear, water-white liquid.

COLOR: Clear, colorless liquid.

pH: Essentially neutral.

VAPOR PRESSURE: Not Determined

VAPOR DENSITY: Heavier than air.

BOILING POINT: (277°F) to (343°F)

FREEZING POINT: NDA = no data available.

MELTING POINT: No data available.

FLASHPOINT AND METHOD: 21°C (70°F) to 67°C (154°F) TAG CC

SOLUBILITY IN WATER: Insoluble

EVAPORATION RATE: Slower than ether.

DENSITY: 7.308

SPECIFIC GRAVITY: 0.890 to 1.000

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions of use. Glycol ethers can be peroxide formers. Potential exists for runaway reaction at elevated temperatures in the presence of strong bases and salts of strong bases. Reacts with strong oxidizing agents.

CONDITIONS TO AVOID: Exposure to air. Avoid heat, sparks, open flames and other ignition sources.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition is highly dependent on

conditions. A complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation. May form explosive peroxides.

INCOMPATIBLE MATERIALS: Strong oxidizing agents, acids, strong bases, salts of strong bases, aluminium.

11. TOXICOLOGICAL INFORMATION

ACUTE

| Chemical Name | ORAL LD ₅₀ (rat) | DERMAL LD ₅₀ (rabbit) | INHALATION LC ₅₀ (rat) |
|------------------|----------------------------------|----------------------------------|---|
| 2- Butoxyethanol | > 500 to 2000 mg/kg (guinea pig) | > 2000 | to 0 No deaths at highest tested does./1 hours, guinea pig. |
| Benzene | 636 MG/KG Rat | > 14000 MG/KG Rabbit | ~ 4000 (NINHL rat) |

EYES: 9.0 /110 (rabbit)

Notes: Draize - xylene

DERMAL LD₅₀: ~ 5 ml/kg (rabbit)

Notes: Dermal LD50 for Xylene: about 5 ml/kg (rabbit).

Dermal LD50 for Benzene, a constituent of Toluene and Xylene: greater than 14000 mg/kg (rabbit).

SKIN ABSORPTION:

Notes: Skin irritation: slight to moderate (rabbit)

ORAL LD₅₀: > 500-2000 mg/kg (guinea pig)

Notes: Oral LD50 for Toluene: 636 mg/kg (rat).

Oral LD50 for Benzene, a constituent of Toluene and Xylene: 5,000 mg/kg (rat).

INHALATION LC₅₀: 6700 ppm (v) (rat) 4 hour(s)

Notes: 2-butoxyethanol: No deaths at highest tested dose. / 1 hours, guinea pig.

SKIN EFFECTS: Irritating to skin.

CHRONIC: Repeated Dose Toxicity for 2-Butoxyethanol: Blood: causes hemolysis of red blood cells and /or anaemia in animals, but not considered relevant for man.

CARCINOGENICITY

IARC: While there is no evidence that industrially acceptable levels of toluene vapors (e.g., the TLV) have produced cardiac effects in humans, animal studies have shown that inhalation of high levels of toluene produced cardiac sensitization. Such sensitization may cause fatal changes in heart rhythms. This latter effect was shown to be enhanced by hypoxia or the injection of adrenalinlike agents. Prolonged and repeated exposures to high concentrations of toluene have resulted in hearing loss in laboratory rats. While the effect of solvents on the human auditory system is uncertain, solvent abusers exposed to high doses of toluene show signs of hearing loss, and occupational exposure to toluene may interact with noise in causing hearing loss in the work environment. The effects of solvents on human hearing are uncertain. Solvent abusers and noise interaction with toluene in the work environment may cause signs of hearing loss.

Notes: Toluene is not known to be mutagenic or carcinogenic. However, the available human and

experimental data are limited and insufficient to assess carcinogenic potential. Toluene is not listed as a carcinogen by NTP, IARC, or OSHA. Intentional abuse of toluene vapors has been linked to damage of brain, liver, kidney and to death. Many case studies involving abuse during pregnancy clearly indicate that toluene is a developmental toxicant. Developmental toxic effects comparable to those observed in humans have been seen in lab animals but the effects were generally associated with maternal toxicity. Xylene, Mixed Isomers: ACGIH Group A4: Not classifiable as a human carcinogen. Carcinogenicity Classification for 2-Butoxyethanol: ACGIH Group A3: Confirmed animal carcinogen with unknown relevance to humans.

SENSITIZATION: Repeat Dose Testing: While there is no evidence that industrially acceptable levels of light hydrocarbon vapors (e.g., the occupational exposure limit) have produced cardiac effects in humans, animals studies have shown that inhalation of high levels produced cardiac sensitization. Such sensitization may cause fatal changes in heart rhythms, which was shown to be enhanced by hypoxia or the injection of adrenaline like substances. While there is no evidence that industrially acceptable levels of toluene vapors (e.g., the TLV) have produced cardiac effects in humans, animal studies have shown that inhalation of high levels of toluene produced cardiac sensitization. Such sensitization may cause fatal changes in heart rhythms. This latter effect was shown to be enhanced by hypoxia or the injection of adrenalinlike agents. Prolonged and repeated exposures to high concentrations of toluene have resulted in hearing loss in laboratory rats. While the effect of solvents on the human auditory system is uncertain, solvent abusers exposed to high doses of toluene show signs of hearing loss, and occupational exposure to toluene may interact with noise in causing hearing loss in the work environment. The effects of solvents on human hearing are uncertain. Solvent abusers and noise interaction with toluene in the work environment may cause signs of hearing loss.

REPRODUCTIVE EFFECTS: Toluene may be harmful to the human fetus based on positive test results with laboratory animals. Case studies show that prolonged intentional abuse of toluene during pregnancy can cause birth defects in humans. Methanol has caused birth defects in laboratory animals, but only when inhaled at extremely high vapor concentrations. The relevance of this finding to humans is uncertain. 2-Butoxyethanol has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

TARGET ORGANS: The effects of solvents on human hearing are uncertain. Solvent abusers and noise interaction with xylene in the work environment may cause signs of hearing loss.

TERATOGENIC EFFECTS: Prolonged and repeated exposures to high concentrations of some volatile hydrocarbon solvents have resulted in hearing loss in rats. Solvent abusers and noise interaction with these solvents in the work environment may cause symptoms of hearing loss.

GENERAL COMMENTS: Reproductive and Developmental Toxicity: In developmental toxicity studies conducted in laboratory animals, there is no evidence of teratogenicity following inhalation exposure to xylene, but delayed development and behavioral impairments have been observed at does levels causing no or only slight maternal toxicity. Neurotoxicity: Prolonged and repeated exposures to high concentrations of some volatile hydrocarbon solvents have resulted in hearing loss in rats. Solvent abusers and noise interaction with these solvents in the work environment may cause symptoms of hearing loss. Short term repeated inhalation exposure of humans to m-xylene (200 ppm or greater) was reported to produce slight impairment of vestibular and visual function and reaction time. In these studies, there was no evidence of cumulative effects but some evidence of tolerance or adaptation. Other Information: Over

exposures of humans to xylene or xylene solvent mixtures produced predominated central nervous system (CNS) effects with less common effects reported to the lung, gastrointestinal tract, liver, kidney and heart. High exposures to xylene in some animal studies, often at levels toxic to the mother, affected embryo/fetal development. The significance of this finding to humans is not known. Ethylbenzene Acute Data: LD50 Oral Rat = 3500 mg/kg, LC50 Inhalation Rat = 4000 ppm for 4 hours, LD50 Dermal Rabbit = 17.8 mL/kg.

COMMENTS: This product may contain benzene (CAS No. 71-43-2) and Toluene (CAS 108-88-3) at less than 1% weight. Acute Toxicity for Xylene: Dermal - LD50, results: Approximately 5 ml/kg (rabbit); Inhalation - LC50, results: 6700 ppm (v) (rat) 4 hour(s); Oral - LD50, results: 3.523 g/kg (rat). Eye Irritation: Draize - 9.0/110 (rabbit), skin irritation: Slight to moderate (rabbit). Repeat Dose Testing: While there is no evidence that industrially acceptable levels of light hydrocarbon vapors (e.g., the occupational exposure limit) have produced cardiac effects in humans, animals studies have shown that inhalation of high levels produced cardiac sensitization. Such sensitization may cause fatal changes in heart rhythms, which was shown to be enhanced by hypoxia or the injection of adrenaline-like substances. **Carcinogenicity:** Chronic inhalation exposure to 750 ppm ethyl benzene vapor produced increased incidences of renal tubular hyperplasia and neoplasma (males and females) and testicular adenomas in F344/N rats and alveolar/bronchiolar (males) and hepatocellular (females) neoplasma in B6C3F1 mice. Genetic toxicology studies found ethyl benzene not to be mutagenic or clastogenic. The relevance of these effects to humans are unclear. Ethylbenzene is listed by the IARC as a Group 2B - possible carcinogen. Reproductive and Developmental Toxicity: In developmental toxicity studies conducted in laboratory animals, there is no evidence of teratogenicity following inhalation exposure to xylene, but delayed development and behavioral impairments have been observed at does levels causing no or only slight maternal toxicity. **Neurotoxicity:** Prolonged and repeated exposures to high concentrations of some volatile hydrocarbon solvents have resulted in hearing loss in rats. Solvent abusers and noise interaction with these solvents in the work environment may cause symptoms of hearing loss. Short term repeated inhalation exposure of humans to m-xylene (200 ppm or greater) was reported to produce slight impairment of vestibular and visual function and reaction time. In these studies, there was no evidence of cumulative effects but some evidence of tolerance or adaptation. Other Information: Over exposures of humans to xylene or xylene solvent mixtures produced predominated central nervous system (CNS) effects with less common effects reported to the lung, gastrointestinal tract, liver, kidney and heart. High exposures to xylene in some animal studies, often at levels toxic to the mother, affected embryo/fetal development. The significance of this finding to humans is not known. Ethylbenzene Acute Data: LD50 Oral Rat = 3500 mg/kg, LC50 Inhalation Rat = 4000 ppm for 4 hours, LD50 Dermal Rabbit = 17.8 mL/kg.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: It may enter soil and may contaminate water.

ECOTOXICOLOGICAL INFORMATION: Acute Toxicity for 2-Butoxyethanol:

Fish: Low toxicity: LC/EC/IC50 greater than 1000 mg/l

Aquatic Invertebrates: Low toxicity: LC/EC/IC50 greater than 1000 mg/l

Algae: Low toxicity: LC/EC/IC50 greater than 100 mg/l

Microorganisms: Low toxicity: LC/EC/IC50 greater than 100 mg/l

CHEMICAL FATE INFORMATION: Persistence/degradability for 2-Butoxyethanol: Readily biodegradable meeting the 10 day window criterion. Oxidizes rapidly by photo-chemical reactions in air.

GENERAL COMMENTS: Avoid uncontrolled releases of this material. Keep out of sewers, storm drains, surface waters and soil. Where spills are possible, a comprehensive spill response plan should be

developed and implemented.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: The preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

EMPTY CONTAINER: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue and can be dangerous. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks static electricity, or other sources of ignition.

RCRA/EPA WASTE INFORMATION: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Flammable Liquids, N.O.S.

TECHNICAL NAME: (Xylene, 2-butoxyethanol)

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: UN 1993

PACKING GROUP: III

NAERG: 128

LABEL: Flammable liquid

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Flammable Liquid

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: This product should be reported as an immediate (acute) health hazard, delayed (chronic) health hazard, and a fire hazard.

FIRE: Yes **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes
CHRONIC: Yes

313 REPORTABLE INGREDIENTS: Xylenes (1330-20-7), ethyl benzene (100-41-4), toluene (108-88-3), benzene (71-43-2), 2-butoxyethanol (111-76-2)

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: To the best of our knowledge, this product is not listed as an extremely hazardous substance.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: Xylene, Mixed Isomers (CAS 1330-20-7) Reportable quantity: 100 lbs.

Ethylbenzene (CAS 100-41-4) Reportable quantity: 1,000 lbs.

Benzene (CAS 71-43-2) Reportable quantity: 10 lbs.

Toluene (CAS 108-88-3) Reportable quantity: 1,000 lbs.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the State of California to cause cancer.: Ethylbenzene (100-41-4), Benzene (71-43-2).

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the State of California to cause birth defects or other reproductive harm.: Benzene (71-43-2), Toluene (108-88-3).

16. OTHER INFORMATION

PREPARED BY: COMPLIANCE DEPT.

REVISION SUMMARY: New MSDS

HMIS RATING

| | | |
|-----------------------------|--------------------------|----------|
| HEALTH: | <input type="checkbox"/> | 2 |
| FLAMMABILITY: | <input type="checkbox"/> | 3 |
| PHYSICAL HAZARD: | <input type="checkbox"/> | 0 |
| PERSONAL PROTECTION: | H | |

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