



SECTION 3 - HAZARDS IDENTIFICATION

PROLONGED OR REPEATED CONTACT MAY DRY THE SKIN. SYMPTOMS MAY INCLUDE REDNESS, BURNING, DRYING AND CRACKING OF SKIN, AND SKIN BURNS. PASSAGE OF THIS MATERIAL INTO THE BODY THROUGH THE SKIN IS POSSIBLE, BUT IT IS UNLIKELY THAT THIS WOULD RESULT IN HARMFUL EFFECTS DURING SAFE HANDLING AND USE. PRE-EXISTING SKIN DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS MATERIAL. HARMFUL IF ABSORBED THROUGH THE SKIN.

EFFECTS OF OVEREXPOSURE - INHALATION: EXPOSURE TO VAPOR OR MIST IS POSSIBLE. SHORT-TERM INHALATION TOXICITY IS LOW. BREATHING SMALL AMOUNTS DURING NORMAL HANDLING IS NOT LIKELY TO CAUSE HARMFUL EFFECTS. BREATHING LARGE AMOUNTS MAY BE HARMFUL. SYMPTOMS ARE MORE TYPICALLY SEEN AT AIR CONCENTRATIONS EXCEEDING THE RECOMMENDED EXPOSURE LIMITS. EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL AND RESPIRATORY IRRITATION, CENTRAL NERVOUS SYSTEM EFFECTS INCLUDING DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE AND POSSIBLE UNCONSCIOUSNESS, AND EVEN DEATH.

EFFECTS OF OVEREXPOSURE - INGESTION: SINGLE DOSE ORAL TOXICITY IS LOW. SWALLOWING SMALL AMOUNTS DURING NORMAL HANDLING IS NOT LIKELY TO CAUSE HARMFUL EFFECTS; SWALLOWING LARGE AMOUNTS MAY BE HARMFUL. THIS MATERIAL CAN ENTER THE LUNGS DURING SWALLOWING OR VOMITING AND CAUSE LUNG INFLAMMATION AND/OR DAMAGE. SINGLE DOSE ORAL TOXICITY IS LOW. SWALLOWING SMALL AMOUNTS DURING NORMAL HANDLING IS NOT LIKELY TO CAUSE HARMFUL EFFECTS; SWALLOWING LARGE AMOUNTS MAY BE HARMFUL.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: SIGNS AND SYMPTOMS OF EXPOSURE TO THIS MATERIAL THROUGH BREATHING, SWALLOWING AND/OR PASSAGE OF THE MATERIAL THROUGH THE SKIN MAY INCLUDE: MOUTH AND THROAT IRRITATION, GASTROINTESTINAL IRRITATION (NAUSEA, VOMITING, DIARRHEA), IRRITATION (NOSE, THROAT, RESPIRATORY TRACT), TIGHTNESS IN THE CHEST, CENTRAL NERVOUS SYSTEM DEPRESSION (DIZZINESS, DROWSINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE, UNCONSCIOUSNESS), MUSCLE WEAKNESS, AND IMPAIRED COORDINATION.

PRIMARY ROUTE(S) OF ENTRY: SKIN CONTACT SKIN ABSORPTION INHALATION INGESTION EYE CONTACT

SECTION 4 - FIRST AID MEASURES

FIRST AID - EYE CONTACT: IF SYMPTOMS DEVELOP, MOVE INDIVIDUAL AWAY FROM EXPOSURE AND INTO FRESH AIR. FLUSH EYES GENTLY WITH WATER WHILE HOLDING EYELIDS APART. IF SYMPTOMS PERSIST OR THERE IS ANY VISUAL DIFFICULTY, SEEK MEDICAL ATTENTION.

FIRST AID - SKIN CONTACT: REMOVE CONTAMINATED CLOTHING. FLUSH EXPOSED AREA WITH LARGE AMOUNTS OF WATER. IF SKIN IS DAMAGED, SEEK MEDICAL ATTENTION. IF SKIN IS NOT DAMAGED AND SYMPTOMS PERSIST, SEEK MEDICAL ATTENTION. LAUNDRER CLOTHING BEFORE REUSE.

FIRST AID - INHALATION: IF SYMPTOMS DEVELOPS, IMMEDIATELY MOVE INDIVIDUAL AWAY FROM EXPOSURE AND INTO FRESH AIR. SEEK IMMEDIATE MEDICAL ATTENTION;

(Continued on Page 3)

```

=====
|                                     |
|          SECTION 4 - FIRST AID MEASURES          |
|                                     |
=====

```

KEEP PERSON WARM AND QUIET. IF PERSON IS NOT BREATHING, BEGIN ARTIFICIAL RESPIRATION. IF BREATHING DIFFICULT, ADMINISTER OXYGEN.

FIRST AID - INGESTION: SEEK MEDICAL ATTENTION. IF INDIVIDUAL IS DROWSY OR UNCONSCIOUS, DO NOT GIVE ANYTHING BY MOUTH; PLACE INDIVIDUAL ON THE LEFT SIDE WITH HEAD DOWN. CONTACT A PHYSICIAN, MEDICAL FACILITY, OR POISON CONTROL CENTER FOR ADVICE ABOUT WHETHER TO INDUCE VOMITING. IF POSSIBLE, DO NOT LEAVE INDIVIDUAL UNATTENDED.

NOTE TO PHYSICIANS: EXPOSURE TO HIGH CONCENTRATIONS OF THIS MATERIAL (e.g., IN ENCLOSED SPACES OR WITH DELIBERATE ABUSE) MAY BE ASSOCIATED WITH CARDIAC ARRHYTHMIAS. EPINEPHRINE AND OTHER SYMPATHOMIMETIC DRUGS MAY INITIATE CARDIAC ARRHYTHMIAS IN PERSONS EXPOSED TO THIS MATERIAL. OTHER DRUGS WITH LESS ARRHYTHMOGENIC POTENTIAL SHOULD BE CONSIDERED. IF SYMPATHOMIMETIC DRUGS ARE ADMINISTERED, OBSERVE FOR THE DEVELOPMENT OF CARDIAC ARRHYTHMIAS.

```

=====
|                                     |
|          SECTION 5 - FIRE FIGHTING MEASURES          |
|                                     |
=====

```

FLASH POINT: 59 F	LOWER EXPLOSIVE LIMIT: 0.6 %
(PENSKY-MARTENS C.C.)	UPPER EXPLOSIVE LIMIT: 7.0 %

AUTOIGNITION TEMPERATURE: N.D.

EXTINGUISHING MEDIA: ALCOHOL FOAM CO2 DRY CHEMICAL FOAM WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS: VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND OR MAY BE MOVED BY VENTILATION AND IGNITED BY PILOT LIGHTS, OTHER FLAMES, SPARKS, HEATERS, SMOKING, ELECTRIC MOTORS, STATIC DISCHARGE, OR OTHER IGNITION SOURCES AT LOCATIONS DISTANT FROM MATERIAL HANDLING POINT. NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY.

SPECIAL FIREFIGHTING PROCEDURES: WEAR A SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE WITH APPROPRIATE TURN-OUT GEAR AND CHEMICAL RESISTANT PERSONAL PROTECTIVE EQUIPMENT. REFER TO THE PERSONAL PROTECTIVE EQUIPMENT SECTION OF THIS MSDS.

```

=====
|                                     |
|          SECTION 6 - ACCIDENTAL RELEASE MEASURES          |
|                                     |
=====

```

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: SMALL SPILLS: ABSORB LIQUID ON VERMICULITE, FLOOR ABSORBENT OR ABSORBENT MATERIAL.

LARGE SPILLS: ELIMINATE ALL IGNITION SOURCES (FLARES, FLAMES INCLUDING PILOT LIGHTS, ELECTRICAL SPARKS). PERSON NOT WEARING PROTECTIVE EQUIPMENT SHOULD BE EXCLUDED FROM AREA OF SPILL UNTIL CLEAN-UP HAS BEEN COMPLETED. STOP SPILL AT SOURCE. PREVENT FROM ENTERING DRAINS, SEWERS, STREAMS OR

(Continued on Page 4)

```

=====
|                                     |
|               SECTION 6 - ACCIDENTAL RELEASE MEASURES               |
|                                     |
=====

```

OTHER BODIES OF WATER. PREVENT FROM SPREADING. IF RUNOFF OCCURS, NOTIFY AUTHORITIES AS REQUIRED. PUMP OR VACUUM TRANSFER SPILLED PRODUCT TO CLEAN CONTAINERS FOR RECOVERY. ABSORB UNRECOVERABLE PRODUCT. TRANSFER CONTAMINATED ABSORBENT, SOIL AND OTHER MATERIALS TO CONTAINERS FOR DISPOSAL.

```

=====
|                                     |
|               SECTION 7 - HANDLING AND STORAGE                       |
|                                     |
=====

```

HANDLING: CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUES (VAPOR, LIQUID, AND/OR SOLID), ALL HAZARD PRECAUTIONS GIVEN IN THE DATA SHEET MUST BE OBSERVED. ALL FIVE GALLON PAILS AND LARGER METAL CONTAINERS INCLUDING TANK TRUCKS SHOULD BE GROUNDED AND/OR BONDED WHEN MATERIAL IS TRANSFERRED. WARNING. SUDDEN RELEASE OF HOT ORGANIC CHEMICAL VAPORS OR MIST FROM PROCESS EQUIPMENT OPERATING AT ELEVATED TEMPERATURE AND PRESSURE, OR SUDDEN INGRESS OF AIR INTO VACUUM EQUIPMENT, MAY RESULT IN IGNITIONS WITHOUT THE PRESENCE OF OBVIOUS IGNITION SOURCES. PUBLISHED "AUTOIGNITION" OR "IGNITION" TEMPERATURE VALUES CANNOT BE TREATED AS SAFE OPERATING TEMPERATURES IN CHEMICAL PROCESSES WITHOUT ANALYSIS OF THE ACTUAL PROCESS CONDITIONS. ANY USE OF THIS PRODUCT IN ELEVATED TEMPERATURE PROCESSES SHOULD BE THOROUGHLY EVALUATED TO ESTABLISH AND MAINTAIN SAFE OPERATING CONDITIONS.

STORAGE: KEEP CONTAINERS TIGHTLY CLOSED AND AWAY FROM HEAT, SPARKS, AND OPEN FLAME. STORE AWAY FROM STRONG OXIDIZING AGENTS IN A COOL DRY PLACE WITH ADEQUATE EXPLOSION PROOF VENTILATION. VAPORS MAY ACCUMULATE AND TRAVEL TO IGNITION SOURCES DISTANT FROM THE HANDLING SITE, FLASH FIRES MAY RESULT. KEEP CONTAINERS CLOSED WHEN NOT IN USE.

```

=====
|                                     |
|               SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION     |
|                                     |
=====

```

ENGINEERING CONTROLS: PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW TLV(S).

RESPIRATORY PROTECTION: IF WORKPLACE EXPOSURE LIMIT(S) OF PRODUCT OR ANY COMPONENT IS EXCEEDED, A NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. OSHA REGULATIONS ALSO PERMIT OTHER NIOSH/MSHA RESPIRATORS (NEGATIVE PRESSURE TYPE) UNDER SPECIFIED CONDITIONS (SEE YOUR INDUSTRIAL HYGIENIST). ENGINEERING OR ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE EXPOSURE.

SKIN PROTECTION: WEAR RESISTANT GLOVES (CONSULT YOUR SAFETY EQUIPMENT SUPPLIER., TO PREVENT REPEATED OR PROLONGED SKIN CONTACT, WEAR IMPERVIOUS CLOTHING AND BOOTS.

EYE PROTECTION: CHEMICAL SPLASH GOGGLES IN COMPLIANCE WITH OSHA REGULATIONS ARE ADVISED; HOWEVER, OSHA REGULATIONS ALSO PERMIT OTHER TYPE SAFETY GLASSES. CONSULT YOUR SAFETY REPRESENTATIVE.

(Continued on Page 5)

```
=====
```

=====|  
| SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION |  
|=====|

OTHER PROTECTIVE EQUIPMENT: USE PROTECTIVE CREAMS WHERE SKIN CONTACT IS LIKELY. REMOVE AND WASH CONTAMINATED CLOTHING BEFORE REUSE.

HYGIENIC PRACTICES: WASH HANDS BEFORE EATING OR SMOKING. SMOKE IN DESIGNATED AREAS ONLY.

=====|  
| SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES |  
|=====|

BOILING RANGE	: 212 - 390 F	VAPOR DENSITY	: Is heavier than air
ODOR	: MILD	ODOR THRESHOLD	: N.D.
APPEARANCE	: RED	EVAPORATION RATE:	Is slower than Butyl Acetate
SOLUBILITY IN H2O	: INSOLUBLE		
FREEZE POINT	: N.E.	SPECIFIC GRAVITY:	0.9825
VAPOR PRESSURE	: N.E.	pH @ 0.0 %	: N.E.
PHYSICAL STATE	: LIQUID	VISCOSITY	: N.D.

COEFFICIENT OF WATER/OIL DISTRIBUTION: N.D.

(See Section 16 for abbreviation legend)

=====|  
| SECTION 10 - STABILITY AND REACTIVITY |  
|=====|

CONDITIONS TO AVOID: AVOID STRONG OXIDIZING AGENTS, EXCESSIVE HEAT, SOURCES OF IGNITION.

INCOMPATIBILITY: AVOID CONTACT WITH: STRONG BASES, STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS: MAY FORM: CARBON DIOXIDE AND CARBON MONOXIDE.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

=====|  
| SECTION 11 - TOXICOLOGICAL PROPERTIES |  
|=====|

TOXICOLOGICAL DATA: VAPOR HARMFUL! OVEREXPOSURE TO HIGH CONCENTRATIONS: EYE, NOSE, THROAT, LUNG IRRITATION; CNS: (BRAIN) EFFECTS, DIZZINESS, DIFFICULTY IN BREATHING, COMA, DEATH. REPORTS OF HEART BEAT IRREGULARITIES FROM MASSIVE EXPOSURE. PROLONGED OVEREXPOSURE CAN CAUSE BRAIN, LIVER KIDNEY EFFECTS/DAMAGE. SKIN: CAN BE ABSORBED. PROLONGED CONTACT IS IRRITATING. EYE: IRRITATION. ORAL: HARMFUL OR FATAL IF SWALLOWED. PULMONARY ASPIRATION HAZARD-CAN ENTER LUNG & CAUSE DAMAGE. PREG: MAY CAUSE MENTAL AND/OR GROWTH RETARDATION IN CHILDREN OF FEMALE SOLVENTS ABUSERS (SNIFFERS); IN RATS PROLONGED BREATHING WAS TOXIC TO FETUSES & MOTHERS - 1500 PPM; NO BIRTH DEFECTS - 5000 PPM. NO EFFECTS - 750 PPM. ETHYLBENZENE IS CLASSIFIED BY

(Continued on Page 6)

=====

SECTION 11 - TOXICOLOGICAL PROPERTIES

IARC AS POSSIBLY CARCINOGENIC TO HUMANS (2B) BASED ON INADEQUATE EVIDENCE IN HUMANS AND SUFFICIENT EVIDENCE IN LABORATORY ANIMALS. LIFETIME INHALATION EXPOSURE OF RATS AND MICE TO HIGH ETHYLBENZENE CONCENTRATIONS RESULTED IN INCREASES IN CERTAIN TYPES OF CANCER, INCLUDING KIDNEY TUMORS IN RATS AND LUNG AND LIVER TUMORS IN MICE. THESE EFFECTS WERE NOT OBSERVED IN ANIMALS EXPOSED TO LOWER CONCENTRATIONS. THERE IS NO EVIDENCE THAT ETHYLBENZENE CAUSES CANCER IN HUMANS.

SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No Information.

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

SECTION 14 - TRANSPORTATION INFORMATION

No transportation information is available.

SECTION 15 - REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: AS FOLLOWS -

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

CERCLA - SARA HAZARD CATEGORY:

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD CHRONIC HEALTH HAZARD FIRE HAZARD

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

CHEMICAL NAME	CAS NUMBER	WT/WT % IS LESS THAN
XYLENES (MIXED ISOMERS)	1330-20-7	25.0 %

(Continued on Page 7)

```

=====
|                                     |
|               SECTION 15 - REGULATORY INFORMATION               |
|                                     |
=====

```

```

----- CHEMICAL NAME ----- CAS NUMBER   WT/WT % IS LESS THAN
ETHYL BENZENE                    100-41-4                10.0 %

```

U.S. STATE REGULATIONS: AS FOLLOWS -

CALIFORNIA PROPOSITION 65:

WARNING: This product contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm:

```

----- CHEMICAL NAME ----- CAS NUMBER
ETHYL BENZENE                    100-41-4
Crystalline Silica (Dust)        14808-60-7
TOLUENE                          108-88-3
BENZENE                          71-43-2
2-ETHYLHEXANOIC ACID            149-57-5
NAPHTHALENE                     91-20-3
FORMALDEHYDE                    50-00-0

```

INTERNATIONAL REGULATIONS: AS FOLLOWS -

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for use of the 16 headings.

CANADIAN WHMIS CLASS: No information available.

TSCA CERTIFICATION: All chemicals in this product are listed, or are exempt from listing, on the TSCA inventory.

```

=====
|                                     |
|               SECTION 16 - OTHER INFORMATION (VOCS)             |
|                                     |
=====

```

HMIS RATINGS - HEALTH: 2      FLAMMABILITY: 3      REACTIVITY: 0

PREVIOUS MSDS REVISION DATE: 02/22/12

VOLATILE ORGANIC COMPOUNDS (VOCS): 4.48 lbs/gal, 536 grams/ltr

LEGEND: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

=====

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

=====

<END OF MSDS>