G.J. CHEMICAL COMPANY, INC. SAFETY DATA SHEET

1. PRODUCT IDENTIFIER

PRODUCT NUMBER(S)-----> 151403

TRADE NAMES AND SYNONYMS -> A 75% solids solution of a Bisphenol F type Epoxy Resin in Xylene; Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]

CAS-No: 25036-25-3 CHEMICAL FAMILY: Diglycidyl Ether

RECOMMENDED USE: Resin for industrial coatings. USES ADVISED AGAINST: No information available

DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company: G.J. CHEMICAL CO., INC.

Address: 40 VERONICA AVENUE

SOMERSET, NJ 08873

Telephone: 1-973-589-1450 Fax: 1-973-589-3072

Emergency Telephone Number

Emergency Phone: 1-800-424-9300 (CHEMTREC)

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29CFR 1910 (OSHA HCS)

Flammable liquids (Category 3)

Acute toxicity, Oral (Category 5)

Acute toxicity, Inhalation (Category 4)

Acute toxicity, Dermal (Category 4)

Skin irritation (Category 2)

Skin sensitization (Category 1)

Serious eye damage (Category 1)

Acute aquatic toxicity (Category 2)

GHS Label elements, including precautionary statements



Pictogram

Signal word Danger

Hazard statement(s)

H226 Flammable liquid and vapor.

H303 May be harmful if swallowed.

H312 + H332 Harmful in contact with skin or if inhaled

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H401 Toxic to aquatic life.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P322 Specific measures (see supplemental first aid instructions on this label).

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P391 Collect spillage.

P403 + P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. INGREDIENTS

Ingredient	CAS No.	% by V Range		CLASSIFICATION
Phenol,4,4-(1-methyl- ethylidene)bis-, polymer 2,2'-[(methylethylidene) bis(4,1-phenylene oxyme bis[oxirane]		 75 	 Skin 	sensitization (Category 1)
Xylene EC-No INDEX-NO.60	1330-20-7 o.215-535-7 01-022-00-9	25 	Acut Acut Skin Seric	e toxicity, Oral (Category 3) e toxicity, Oral (Category 5) e toxicity, Dermal (Category 4) irritation (Category 2) ous eye damage (Category 1) e aquatic toxicity (Category 2) onic aquatic toxicity (Category 2)
Ethyl Benzene EC-No Index-No.60	100-41-4 0.202-849-4 01-023-00-4	<4 	Acut	emable Liquids (Category 2) e Toxicity, Oral (Category 4) e aquatic toxicity (Category 2) nic aquatic toxicity (Category 2)

4. FIRST-AID PROCEDURES

Emergency and First Aid Procedures:

INHALATION: EPOXY RESIN SOLUTION 07-500

Remove from exposure, restore breathing. Keep warm and quiet. Notify physician.

EYSE(Splash): EPOXY RESIN SOLUTION 07-500

Immediately flush eyes with water for 15 minutes. Hold eyelids open for complete irrigation. Remove contact lenses, if worn, after initial flush. Rest eyes for 30 minutes, if redness, burning, blurred vision or swelling persist take to a physician.

SKIN (Splash): EPOXY RESIN SOLUTION 07-500

Wash affected area with soap and water. Remove contaminated clothing. Consult a physician if irritation persists. Do not reuse clothing until cleaned. Contaminated leather articles, including shoes cannot be decontaminated and should be destroyed to prevent reuse.

INGESTION: EPOXY RESIN SOLUTION 07-500

Do not induce vomiting. Have victim rinse out mouth with water, then drink sips of water to remove taste from mouth. Consult a physician or poison control center, treat symptomatically. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Consult a physician or poison control center, treat symptomatically.

5. FIRE FIGHTING MEASURES

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:

FIRE AND EXPLOSION HAZARD: DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK. VAPOR-AIR MIXTURES ARE EXPLOSIVE.

UNIFORM FIRE CODE: Flammable Liquid Class 1C

Flash Point: 75°F PMCC LEL %: 1.0

UEL %: 7.0

SUITABLE EXTINGUISHING MEDIA: Foam--> x CO2--> x Dry Chemical--> x

Water-fog--> x Other-->

CONDITIONS OF FLAMMABILITY: Flammable Liquid

ADVICE FOR FIREFIGHTERS: Isolate fire and deny unnecessary entry. Keep containers tightly closed. Isolate from all sources of ignition. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Material will not burn unless preheated. Shut off source. Water fog may be used to cool closed containers to prevent pressure build up and possible auto ignition or explosion when exposed to extreme heat. Wear NIOSH approved self-contained breathing apparatus for confined spaces and where there is exposure to vapors. Use full fire-fighting protective clothing.

If protective equipment is not available or not used, fight fire from a protected location or safe distance.

<u>UNUSUAL FIRE AND EXPLOSION HAZARDS</u>: Closed containers may explode when exposed to extreme heat. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Vapor is heavier than air and can travel considerable distance to a source of ignition and flashback. Liquid floats on water. Fine sprays/mists may be combustible at temp. below flash point.

<u>COMBUSTION PRODUCTS:</u> Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, carbon oxides and other unidentified organic compounds evolve when this material undergoes combustion.

6. ACCIDENTAL RELEASE MEASURES

<u>PERSONAL PROTECTIVE MEASURES</u>: Eliminate ignition sources in the vicinity of the spill or released vapor. Avoid breathing vapors, mist or gas. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations.

METHODS FOR CONTAINMENT AND CLEAN UP: Use explosion proof equipment. Shut off valves, contain spill, keep out of water sources and sewers, for smaller spills add non-flammable absorbent such as clay or silica in spill area. For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent. Remove contaminated soil to remove contaminated trace residues. Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. Flush with water to remove trace reside. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable government regulations. Keep all nonessential people away.

REPORTABLE QUANTITY: Xylene -100lbs, Ethylbenzene - 1000lbs.

The Superfund Amendments and Reauthorization Act (SARA) Section 304 requires that a release equal to or greater than the reportable quantity for this substance be immediately reported to the local Emergency Planning Committee and the State Emergency Response Commission (40 CFR 355.40). If the release of this substance is reportable under CERCLA Section 103, the National Response Center must be notified immediately at (800) 424-8802 or (202) 426-2675 in the metropolitan Washington, D.C. area (40 CFR 302.6).

7. HANDLING AND STORAGE

<u>PERSONAL PRECAUTIONARY MEASURES:</u> This material presents a fire hazard. Invisible vapor spreads easily and can be set on fire by many sources, such as pilot lights, welding equipment, and electrical motors and switches. Vapor is heavier than air and can travel considerable distance to a source of ignition and flash back. Avoid breathing vapors in top of shipping container. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Do not breathe vapor. Do not take internally.

HANDLING INFORMATION: Keep liquid and vapor away from heat, sparks and flame. Surfaces that are sufficiently 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. Vapors may accumulate and travel to ignition sources distant from the handling site; flash fire can result. Avoid work practices that may release volatile components in the atmosphere. Avoid contaminating soil or releasing material into sewage and drainage systems. Use non-sparking tools to open or close containers.

<u>CONDITIONS FOR SAFE STORAGE</u>: Follow maximum allowed pile heights specified in the BOCA codes or the NFPA manual. Local fire authorities should be notified for storage of this material in any quantity. Local permits are required for storage in warehouse quantities. Store large quantities only in buildings designed to comply with OSHA 1910.106. Keep containers tight and upright to prevent leakage. Do not store with incompatible materials. Keep containers closed when not in use.

<u>CONTAINER WARNINGS:</u> Containers should be Bonded and Grounded when pouring. Avoid free fall of liquid in excess of a few inches. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum reconditioner.

8. EXPOSURE CONTROL (PERSONAL PROTECTION)

EXPOSURE GUIDELINES:

Ingredient	CAS No.	% by WT. Range	Exposure Limits
ethylidene)bis-, polymer		 75 	 None Established
2,2'-[(methylethylidene) bis(4,1-phenylene oxymbis[oxirane]		 	
Xylene	1330-20-7	 25 	
Ethyl Benzene	100-41-4	<4 	100ppm TLV(ACGIH) 125ppm STEL(OSHA&NIOSH) 100ppm TWA(NIOSH)

Key: (PEL) = Permissible Exposure Limit OSHA

(TLV) = Threshold Limit Value OSHA & ACGIH

(STEL) = Short Term Exposure Limit ACGIH

(WEEL) = USA. Workplace Environmental Exposure Levels

(TWA) = Time Weighted Average

CAS = Chemical Abstracts Registry Number

IDLH = Immediate Danger to Life and Health

EXPOSURE GUIDELINES: Consider the potential hazards of this material (Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective

equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

ENGINEERING CONTROLS: Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part 1910. Explosion proof motors should be used in mechanical ventilation.

<u>RESPIRATORY PROTECTION:</u> Wear a NIOSH approved cartridge respirator for exposures below OSHA PEL. Above OSHA PEL wear a supplied air respirator with full face mask.

BODY CLOTHING:

Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged contact with this substance. Use chemical resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse.

SKIN PROTECTION:

Employee must wear appropriate protective gloves to prevent contact with this substance. Nitrile rubber chemical resistant gloves.

EYE/FACE PROTECTION: Use safety eyewear with splash guards or face shield. Shower and eyewash should be located in an easily accessible location to the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE, COLOR AND ODOR: Epoxy Resin Solution 07-500 is a clear viscous liquid.

ODOR THRESHOLD:

pH:

No Data Available

No Data Available

No data available

MELTING POINT:

No data available

 BOILING POINT:
 282°F

 SPECIFIC GRAVITY:
 1.09@20°C

 DENSITY (25°C):
 1.09g/ml@20°C

VAPOR PRESSURE: 1.0mmHg@20°C(68°F) Xylene

VAPOR DENSITY: 3.7

WATER SOLUBILITY: Slightly Soluble PARTITION COEFFICIENT N- No data available

OCTANOL/WATER

FLASH POINT: 75°F - PMCC
EVAPORATION RATE (BUTYL ACETATE=1): No data available
UPPER FLAMMABILITY LIMIT: No data available
LOWER FLAMMABILITY LIMIT: No data available
AUTO INGNITION TEMPERATURE: No data available
DECOMPOSITION TEMPERATURE: No data available

VISCOSITY:

EXPLOSIVE PROPERTIES:

No data available

OXIDIZING PROPERTIES:

No data available

OTHER INFORMATION: No data available

10. STABILITY AND REACTIVITY INFORMATION

<u>CHEMICAL STABILITY</u>: Unstable () Stable (X)

<u>POSSIBILITY OF HAZARDOUS REACTIONS:</u> Reaction with some curing agents may produce considerable heat. Run-a-way cure reactions may char and decompose the resin system. Avoid temperatures above 300°C. Pressure build-up can be rapid.

<u>CONDITIONS TO AVOID</u>: Heat, flames and sparks. Reaction with some curing agents may produce considerable heat. Run-a-way cure reactions may char and decompose the resin system.

<u>INCOMPATIBLE MATERIALS:</u> Can react vigorously with strong oxidizing agents, strong Lewis or mineral acids, and strong mineral and organic bases. Especially primary and secondary aliphatic amines. Do not allow molten product to contact water or other liquids. This can cause violent eruptions, splatter hot material, or ignite flammable material.

<u>HAZARDOUS DECOMPOSITION PRODUCTS:</u> Fumes, Smoke, Carbon Monoxide, Aldehydes and other decomposition products where combustion is not complete. Decomposition and combustion products may be toxic.

HAZARDOUS POLYMERIZATION: May occur () Will not occur (X)

11. TOXICOLOGICAL INFORMATION

ACUTE HEALTH EFFECTS:

Routes of Entry: Inhalation--> x Skin--> x Ingestion--> x

Effects of overexposure:

Acute:

Eye> Causes eye irritation; Vapors may be irritating

Skin> May be harmful if absorbed through skin. Causes skin irritation. Skin sensitization (Allergy) may be evidenced by rashes, especially hives;

Inhalation> > Moderately irritating to respiratory passages. May be slightly toxic. May produce CNS depression.

Ingestion> May be moderately toxic and may be harmful if swallowed. May produce CNS depression.

Chronic: N/A

Medical Conditions Aggravated by Exposure> Preexisting skin and eye disorders may be aggravated by exposure to this product. Pre-existing skin or lung allergies may increase the chance of developing increased allergy symptoms from exposure to this product.

ACUTE TOXICITY:

The effects of overexposure shown in Section II are based on acute toxicity profiles. Typical values are:

Ingredient	Oral LD50(Rat) Sk	halation LC50 	
Epoxy Resin (BIS F)	 No Data	 No Data	
Xylene	 4300mg/kg	 1700mg/kg	
Ethyl Benzene		 15433mg/kg	1 1

Epoxy Resin (Bisphenol F) -

MUTAGENIC EFFECTS: These resins have shown activity in vitro microbial mutagenicity screening and have produced chromosomal aberrations in cultured rat liver cells. The significance of these tests to man is unknown.

CARCINOGEN STATUS: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC,NTP, OSHA, or ACGIH.

Recent 2-year bioassays in rats and mice exposed by the dermal route to the diglycidyl ether of bisphenol A yielded no evidence of carcinogenicity to the skin or any other organ.

REPRODUCTIVE TOXICITY: No data available

Specific target organ toxicity (STOT-SE) single exposure (Globally Harmonized System): no data available

Specific target organ toxicity (STOT-RE) - repeated exposure (Globally

Harmonized System): no data available ASPIRATION HAZARD: No data available

ADDITIONAL INFORMATION: No data available

Xylene & Ethylbenzene-

MUTAGENIC EFFECTS: No information available.

CARCINOGEN STATUS:

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Ethylbenzene)

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Xylene) No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP or OSHA.

REPRODUCTIVE TOXICITY: No data available.

Specific target organ toxicity (STOT-SE) - single exposure (Globally Harmonized System): no data available

Specific target organ toxicity (STOT-RE)- repeated exposure (Globally Harmonized System): Central nervous system depressant. Poisoning may also affect the nervous system, liver and kidneys.

12. **ECOLOGICAL INFORMATION**

HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS

May be dangerous if it enters water intakes.

Notify local health and wildlife officials.

Notify operators of nearby water intakes.

AQUATIC TOXICITY:

o-XYLENE:

AQUATIC TOXICITY: >100 MG/L/96 hours-D. magna TLM in fresh water

WATERFOWL TOXICITY: Data not available

BIOLOGICAL OXYGEN DEMAND (BOD): 0 lb/lb 5 days, 2.5% (theoretical) 8 days

FOOD CHAIN CONCENTRATION POTENTIAL: Data not available

m-XYLENE:

AQUATIC TOXICITY: 22 PPM/96 hours-bluegill TLM in fresh water

WATERFOWL TOXICITY: Data not available

BIOLOGICAL OXYGEN DEMAND (BOD): 0 lb/lb 5 days 0% (theoretical) 8 days

FOOD CHAIN CONCENTRATION POTENTIAL: Data not available

p-XYLENE:

AQUATIC TOXICITY: 22 PPM/96 hours-bluegill TLM in fresh water

WATERFOWL TOXICITY: Data not available

BIOLOGICAL OXYGEN DEMAND (BOD): 0 lb/lb in 5 days

FOOD CHAIN CONCENTRATION POTENTIAL: Data not available

PERSISTENCE AND BIODEGRADABILITY: Xylene is readily biodegradable, but the product contains components that are persistent in the environment.

Oxidizes rapidly by photo-chemical reactions in air.

BIOACCUMULATION: Not expected to bio-accumulate significantly.

ETHYLBENZENE:

Toxicity to Fish:

LC50 - Cyprinodon variegatus (sheepshead minnow) - 88.00 mg/l - 96 h

LC50 - Lepomis macrochirus (Bluegill) - 80.00 mg/l - 96 h

NOEC - Cyprinodon variegatus (sheepshead minnow) - 88 mg/l - 96 h

LC50 - Oncorhynchus mykiss (rainbow trout) - 4.2 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 2.90 mg/l - 48 h

WATERFOWL TOXICITY: No data available

PERSISTANCE AND DEGRADABILITY: No data available

BIOACCUMULATION: No data available

<u>BIOLOGICAL OXYGEN DEMAND (BOD)</u>: No data available <u>FOOD CHAIN CONCENTRATION POTENTIAL</u>: No data available

13. **DISPOSAL CONSIDERATIONS**

WASTE TREATMENT METHODS: Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with all applicable disposal regulations. Incinerate under controlled conditions in a permitted facility.

CONTAMINATED PACKAGING: Dispose of as unused product.

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

RCRA: The unused product is a RCRA hazardous waste if discarded. The RCRA ID

number is: U239

If the waste is a spent solvent, the appropriate spent solvent code should be used. DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE, 48 CFR 262

14. TRANSPORT INFORMATION

DOT Shipping Name------> Resin Solution
Contains-----> Xylene, Ethylbenzene
DOT Hazard Classification---->3
DOT Label Codes----->1866
DOT Package Code----->III
Emergency Response Guide->127
Marine Pollutant----->No

IMDG

UN number: 1866 Class: 3 Packing group: III EMS-No: F-E, S-D

Proper shipping name: Resin Solution (contains: XYLENE,ETHYLBENZENE)

Marine pollutant: No

IATA

UN number: 1866 Class: 3 Packing group: III

Proper shipping name: Resin Solution (Contains: Xylene, Ethylbenzene)

15. <u>REGULATORY INFORMATION</u>

SARA TITLE III (Superfund Amendment and Reauthorization Act)

SECTION 302 AND 304: Extremely Hazardous Substance List (40 CFR 355)- Not Listed

SECTION 313: Toxic Chemicals Listing (40 CFR 372.65)- Not Listed

SECTION 311/312: Hazard Categorization (40 CFR 370)- Acute Health Hazard Chronic Health Hazard, Fire Hazard

<u>CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)</u>

SECTION 102(A) Hazardous Substances (40 CFR 302.4)- Listed Reportable Quantity – Xylene CAS 1330-20-7 -100lbs, Ethylbenzene CAS 100-41-4 - 1000lbs.

SECTION 101(14) Reportable Quantity: Xylene CAS 1330-20-7-100lbs, Ethylbenzene CAS 100-41-4 - 1000lbs.

Massachusetts Right To Know Components Ethylbenzene CAS-No.100-41-4; Xylene 1330-20-7

Pennsylvania Right To Know Components Poly(Bisphenol A-co-epichlorohydrin), glycidyl end-capped CAS-No. 25036-25-3 Ethylbenzene CAS-No.100-41-4 Xylene 1330-20-7

New Jersey Right To Know Components Poly(Bisphenol A-co-epichlorohydrin), glycidyl end-capped CAS-No. 25036-25-3 Ethylbenzene CAS-No.100-41-4 Xylene 1330-20-7

California Prop. 65 Components

WARNING! This product contains a chemical known to the State of California to cause cancer. Ethylbenzene CAS-No.100-41-4, Benzene - 71-43-2

Other information: Ethylbenzene, and Benzene are impurity components of Xylene.

TSCA (Toxic Substance Control Act)

Poly(Bisphenol A-co-epichlorohydrin), glycidyl end-capped CAS-No. 25036-25-3, Xylene 1330-20-7, Ethylbenzene CAS-No.100-41-4, Benzene - 71-43-2 are listed on the TSCA Inventory.

16. OTHER INFORMATION:

HMIS (Hazardous Materials Identification System)

Hazard Rating:

4-Extreme

3-High

2-Moderate

1-Slight

0-Insignificant

NFPA RATINGS (SCALE 0-4): Health=2 Fire=3 Reactivity=0

HMIS RATINGS (SCALE 0-4): Health=2 Fire=3 Reactivity=0 PPE=G

Date of preparation-----> January 7, 2007

Revision Number----> 1.2

Revision Date-----> July 6, 2015

Prepared by-----> T.G. Fenstermaker, Jr.

Acronyms:

ACGIH - American Conference of Governmental Industrial Hygenists

AIHA - American Industrial Hygiene Association
ANSI - American Nation Standards Institute

API - American Petroleum Institute

CERCLA - Comprehensive Emergency Response, Compensation, and Liability Act

DOT - U.S. Department of Transportation

EPA - U.S. Environmental Protection Agency

HMIS - Hazardous Materials Information System

IARC - International Agency For Research On Cancer

MSHA - Mine Safety and Health Administration NFPA - National Fire Protection Association

NIOSH - National Institute of Occupational Safety and Health

NOIC - Notice of Intended Change (Proposed change to ACGIH TLV)

NTP - National Toxicology Program
OPA - Oil Pollution Act of 1990

OSHA - U.S. Occupational Safety & Health Administration

PEL - Permissible Exposure Limit (OSHA)
RCRA - Resource Conservation and Recovery Act
REL - Recommended Exposure Limit (NIOSH)

SARA - Superfund Amendments and Reauthorization Act of 1986 Title III

SCBA - Self-Contained Breathing Apparatus

STEL - Short-Term Exposure Limit (generally 15 minutes)

TLV - Threshold Limit Value

TSCA - Toxic Substances Control Act
TWA - Time Weighted Average (8hr.)

WHMIS - Canadian Workplace Hazardous Materials Information System

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