

ERAPOL L-ETX76D

Era Polymers Pty Ltd

Chemwatch Hazard Alert Code: 2

Chemwatch: 9-46704

Issue Date: 24/01/2014

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Safety Data Sheet following ANSI Z400.1 recommendations

S.Local.USA.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

| | |
|-------------------------------|-----------------|
| Product name | ERAPOL L-ETX76D |
| Chemical Name | Not Applicable |
| Synonyms | Not Available |
| Proper shipping name | Not Applicable |
| Chemical formula | Not Applicable |
| Other means of identification | Not Available |
| CAS number | Not Applicable |

Relevant identified uses of the substance or mixture and uses advised against

| | |
|--------------------------|--|
| Relevant identified uses | Use according to manufacturer's directions. Polyurethane prepolymer |
|--------------------------|--|

Details of the supplier of the safety data sheet

| | |
|-------------------------|---------------------------------------|
| Registered company name | Era Polymers Pty Ltd |
| Address | 25-27 Green Street 2019 NSW Australia |
| Telephone | +61 (0)2 9666 3788 |
| Fax | +61 (0)2 9666 4805 |
| Website | www.erapol.com.au |
| Email | erapol@erapol.com.au |

Emergency telephone number

| | |
|-----------------------------------|---------------|
| Association / Organisation | CHEMWATCH |
| Emergency telephone numbers | Not Available |
| Other emergency telephone numbers | Not Available |

CHEMWATCH EMERGENCY RESPONSE

| Primary Number | Alternative Number 1 | Alternative Number 2 |
|----------------|----------------------|----------------------|
| 877 715 9305 | +612 9186 1132 | Not Available |

Once connected and if the message is not in your preferred language then please dial 01

Una vez conectado y si el mensaje no está en su idioma preferido, por favor marque 02

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

CHEMWATCH HAZARD RATINGS

| | Min | Max |
|--------------|-----|-----|
| Flammability | 0 | |
| Toxicity | 2 | |
| Body Contact | 0 | |
| Reactivity | 1 | |
| Chronic | 2 | |

0 = Minimum
1 = Low
2 = Moderate
3 = High
4 = Extreme



SAFETY ADVICE

| | |
|--------------|---|
| Risk Phrases | <p>May cause SENSITISATION by inhalation.</p> <p>Limited evidence of a carcinogenic effect.</p> <p>Harmful by inhalation.</p> |
|--------------|---|

- Keep out of reach of children.
- Keep container tightly closed.
- Keep container in a well ventilated place.
- Keep away from food, drink and animal feeding stuffs.
- Do not breathe gas/fumes/vapour/spray.
- Wear suitable protective clothing.
- Wear suitable gloves.
- In case of accident or if you feel unwell IMMEDIATELY contact Doctor or Poisons Information Centre (show label if possible).
- If swallowed, seek medical advice immediately and show this container or label.
- Use only in well ventilated areas.
- Avoid exposure - obtain special instructions before use.
- Dispose of this material and its container at hazardous or special waste collection point.
- In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Other hazards

Cumulative effects may result following exposure*.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**Substances**

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|---------------|-----------|--|
| Not Available | >60 | Polyurethane prepolymer (TDI/PTMEG) |
| 584-84-9 | <1 | toluene-2,4-diisocyanate |

SECTION 4 FIRST AID MEASURES**Description of first aid measures**

| | |
|---------------------|--|
| Eye Contact | <p>If this product comes in contact with eyes:</p> <ul style="list-style-type: none"> ▶ Wash out immediately with water. ▶ If irritation continues, seek medical attention. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
| Skin Contact | <p>If skin or hair contact occurs:</p> <ul style="list-style-type: none"> ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation. |
| Inhalation | <ul style="list-style-type: none"> ▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area. ▶ Other measures are usually unnecessary. <p>Following uptake by inhalation, move person to an area free from risk of further exposure. Oxygen or artificial respiration should be administered as needed. Asthmatic-type symptoms may develop and may be immediate or delayed up to several hours. Treatment is essentially symptomatic. A physician should be consulted.</p> |
| Ingestion | <ul style="list-style-type: none"> ▶ Immediately give a glass of water. ▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor. |

Indication of any immediate medical attention and special treatment needed

Toluene diisocyanate is a known pulmonary sensitizer. Annual medical surveillance should be conducted including pulmonary history, examination of the heart and lungs, 14 x 17 inch (35 x 47 cm) x-ray and pulmonary function testing (FCV, FEV1). In normal commercial preparations of toluene diisocyanate, the 2,4-isomer dominates in the ratio 4:1. However it is also hydrolysed, in air, more rapidly than the 2,6-isomer. Airway sensitivities may result from the appearance of immunoglobulins in the blood. Frequent inability to detect antibodies to TDI in clinical cases may result from the routine use of diagnostic antigens containing predominantly 2,4-TDI, whereas individuals may have been exposed to atmospheres in which 2,6-TDI was the predominant isomer. [Karol & Jin, Frontiers of Molecular Toxicology, pp 55-61, 1992]

SECTION 5 FIREFIGHTING MEASURES**Extinguishing media**

- ▶ There is no restriction on the type of extinguisher which may be used.
- ▶ Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture

Fire Incompatibility None known.

Advice for firefighters

- Fire Fighting**
- ▶ Alert Fire Brigade and tell them location and nature of hazard.
 - ▶ Wear breathing apparatus plus protective gloves in the event of a fire.
 - ▶ Prevent, by any means available, spillage from entering drains or water courses.

| | |
|------------------------------|---|
| | <ul style="list-style-type: none"> ▶ Use fire fighting procedures suitable for surrounding area. ▶ DO NOT |
| Fire/Explosion Hazard | <ul style="list-style-type: none"> ▶ Non combustible. ▶ Not considered a significant fire risk, however containers may burn. <p>May emit poisonous fumes.</p> |

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

| | |
|---------------------|---|
| Minor Spills | <ul style="list-style-type: none"> ▶ Clean up all spills immediately. ▶ Avoid breathing vapours and contact with skin and eyes. ▶ Control personal contact with the substance, by using protective equipment. ▶ Contain and absorb spill with sand, earth, inert material or vermiculite. ▶ Wipe up. |
| Major Spills | <p>Moderate hazard.</p> <ul style="list-style-type: none"> ▶ Clear area of personnel and move upwind. ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Wear breathing apparatus plus protective gloves. ▶ Prevent, by any means available, spillage from entering drains or water course. |
| | Personal Protective Equipment advice is contained in Section 8 of the MSDS. |

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

| | |
|--------------------------|---|
| Safe handling | <ul style="list-style-type: none"> ▶ Avoid all personal contact, including inhalation. ▶ Wear protective clothing when risk of exposure occurs. ▶ Use in a well-ventilated area. ▶ Prevent concentration in hollows and sumps. ▶ DO NOT |
| Other information | |

Conditions for safe storage, including any incompatibilities

| | |
|--------------------------------|---|
| Suitable container | <ul style="list-style-type: none"> ▶ Polyethylene or polypropylene container. ▶ Packing as recommended by manufacturer. ▶ Check all containers are clearly labelled and free from leaks. |
| Storage incompatibility | <p>None known</p> <ul style="list-style-type: none"> ▶ NOTE: May develop pressure in containers; open carefully. Vent periodically. ▶ Segregate from alcohol, water. |

PACKAGE MATERIAL INCOMPATIBILITIES

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|---|--------------------------|--|---------------|---------------|--|-------------------------|
| US ACGIH Threshold Limit Values (TLV) | toluene-2,4-diisocyanate | Toluene-2,4- or 2,6-diisocyanate (or as a mixture) | 0.005 (ppm) | 0.02 (ppm) | Not Available | TLV® Basis: (Resp sens) |
| US OSHA Permissible Exposure Levels (PELs) - Table Z1 | toluene-2,4-diisocyanate | Toluene-2,4-diisocyanate (TDI) | Not Available | Not Available | 0.14 (mg/m ³) / 0.02 (ppm) | Not Available |
| US NIOSH Recommended Exposure Limits (RELs) | toluene-2,4-diisocyanate | TDI; 2,4-TDI; 2,4-Toluene diisocyanate | Not Available | Not Available | Not Available | Ca See Appendix A |

EMERGENCY LIMITS

| Ingredient | TEEL-0 | TEEL-1 | TEEL-2 | TEEL-3 |
|--------------------------|-------------------|------------------|------------------|-----------------|
| toluene-2,4-diisocyanate | 0.005 / 0.25(ppm) | 0.02 / 0.75(ppm) | 0.083 / 1.5(ppm) | 0.51 / 1.5(ppm) |
| Ingredient | Original IDLH | | Revised IDLH | |
| ERAPOL L-ETX76D | Not Available | | Not Available | |

Exposure controls

| | |
|---|---|
| Appropriate engineering controls | <p>Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p> <p>Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.</p> |
|---|---|

| | |
|--------------------------------|--|
| Personal protection |  |
| Eye and face protection | <ul style="list-style-type: none"> ▶ Safety glasses with side shields ▶ Chemical goggles. ▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. |
| Skin protection | See Hand protection below |
| Hand protection | <p>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</p> <p>The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.</p> <p>Suitability and durability of glove type is dependent on usage.</p> |
| Body protection | See Other protection below |
| Other protection | <ul style="list-style-type: none"> ▶ Overalls. ▶ P.V.C. apron. ▶ Barrier cream. ▶ Skin cleansing cream. |
| Thermal hazards | |

Recommended material(s)**GLOVE SELECTION INDEX**

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the **computer-generated**

ERAPOL L-ETX76D Not Available

| Material | CPI |
|----------|-----|
| | |

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE

Respiratory protection

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

| Required Minimum Protection Factor | Half-Face Respirator | Full-Face Respirator | Powered Air Respirator |
|------------------------------------|----------------------|----------------------|-------------------------|
| up to 10 x ES | A-AUS P2 | - | A-PAPR-AUS / Class 1 P2 |
| up to 50 x ES | - | A-AUS / Class 1 P2 | - |
| up to 100 x ES | - | A-2 P2 | A-PAPR-2 P2 ^ |

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO₂), G = Agricultural chemicals, K = Ammonia(NH₃), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

| Appearance | Clear pale amber | | |
|---|------------------|--|---------------|
| Physical state | Liquid | Relative density (Water = 1) | 1.10 |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
| Odour threshold | Not Available | Auto-ignition temperature (°C) | Not Available |
| pH (as supplied) | Not Available | Decomposition temperature | Not Available |
| Melting point / freezing point (°C) | Not Available | Viscosity (cSt) | Not Available |
| Initial boiling point and boiling range (°C) | Not Available | Molecular weight (g/mol) | Not Available |
| Flash point (°C) | Not Available | Taste | Not Available |
| Evaporation rate | Not Available | Explosive properties | Not Available |
| Flammability | Not Available | Oxidising properties | Not Available |
| Upper Explosive Limit (%) | Not Available | Surface Tension (dyn/cm or mN/m) | Not Available |
| Lower Explosive Limit (%) | Not Available | Volatile Component (%vol) | Not Available |
| Vapour pressure (kPa) | Not Available | Gas group | Not Available |

| | | | |
|---------------------------|---------------|----------------------|---------------|
| Solubility in water (g/L) | Reacts | pH as a solution(1%) | Not Available |
| Vapour density (Air = 1) | Not Available | VOC g/L | Not Available |

SECTION 10 STABILITY AND REACTIVITY

| | |
|------------------------------------|--|
| Reactivity | See section 7 |
| Chemical stability | <ul style="list-style-type: none"> ▶ Presence of incompatible materials. ▶ Product is considered stable. ▶ Hazardous polymerisation will not occur. |
| Possibility of hazardous reactions | See section 7 |
| Conditions to avoid | See section 7 |
| Incompatible materials | See section 7 |
| Hazardous decomposition products | See section 5 |

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

| | |
|--------------|---|
| Inhaled | The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. |
| Ingestion | The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. |
| Skin Contact | The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. |
| Eye | Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn). |
| Chronic | On the basis, primarily, of animal experiments, concern has been expressed that the material may produce carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment. Practical evidence shows that inhalation of the material is capable of inducing a sensitisation reaction in a substantial number of individuals at a greater frequency than would be expected from the response of a normal population. Pulmonary sensitisation, resulting in hyperactive airway dysfunction and pulmonary allergy may be accompanied by fatigue, malaise and aching. Significant symptoms of exposure may persist for extended periods, even after exposure ceases. Symptoms can be activated by a variety of nonspecific environmental stimuli such as automobile exhaust, perfumes and passive smoking. |

| ERAPOL L-ETX76D | TOXICITY | IRRITATION |
|-----------------|---------------|---------------|
| | Not Available | Not Available |

| toluene-2,4-diisocyanate | TOXICITY | IRRITATION |
|--------------------------|-------------------------------------|------------------------------------|
| | Inhalation (rat) LC50: 14 ppm/14 hr | Eye (rabbit): 100 mg - SEVERE |
| | Inhalation (rat) LC50: 600 ppm/6 hr | Skin (rabbit): 500 mg(open)-SEVERE |
| | Oral (rat) LD50: 5800 mg/kg | Skin (rabbit):500 mg/24hr-moderate |
| | Not Available | Not Available |

| | |
|--------------------------|---|
| ERAPOL L-ETX76D | Allergic reactions which develop in the respiratory passages as bronchial asthma or rhinoconjunctivitis, are mostly the result of reactions of the allergen with specific antibodies of the IgE class and belong in their reaction rates to the manifestation of the immediate type. In addition to the allergen-specific potential for causing respiratory sensitisation, the amount of the allergen, the exposure period and the genetically determined disposition of the exposed person are likely to be decisive. Factors which increase the sensitivity of the mucosa may play a role in predisposing a person to allergy. They may be genetically determined or acquired, for example, during infections or exposure to irritant substances. Immunologically the low molecular weight substances become complete allergens in the organism either by binding to peptides or proteins (haptens) or after metabolism (prohaptens). |
| TOLUENE-2,4-DIISOCYANATE | The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. |

| | | | |
|-------------------------------|--|------------------------|-----------------------|
| Acute Toxicity | Acute Toxicity (Inhalation) Category 4 | Carcinogenicity | Carcinogen Category 2 |
| Skin Irritation/Corrosion | Not Applicable | Reproductivity | Not Applicable |
| Serious Eye Damage/Irritation | Not Applicable | STOT - Single Exposure | Not Applicable |

| | | | |
|--|-----------------------------------|---------------------------------|----------------|
| Respiratory or Skin sensitisation | Respiratory Sensitizer Category 1 | STOT - Repeated Exposure | Not Applicable |
| Mutagenicity | Not Applicable | Aspiration Hazard | Not Applicable |

CMR STATUS

| | | | |
|--------------------|--------------------------|---|---------------------------------|
| CARCINOGEN | toluene-2,4-diisocyanate | US Air Toxics Hot Spots TSD for Describing Available Cancer Potency Factors US Environmental Defense Scorecard Recognized Carcinogens | 2B P65-MC Ca See Appendix A P65 |
| RESPIRATORY | toluene-2,4-diisocyanate | US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs) - Respiratory | X A |
| SKIN | toluene-2,4-diisocyanate | US ACGIH Threshold Limit Values (TLV) Notice of Intended Changes - Skin | Yes |

SECTION 12 ECOLOGICAL INFORMATION**Toxicity**

DO NOT discharge into sewer or waterways.

Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|---------------|-------------------------|------------------|
| Not Available | Not Available | Not Available |

Bioaccumulative potential

| Ingredient | Bioaccumulation |
|---------------|-----------------|
| Not Available | Not Available |

Mobility in soil

| Ingredient | Mobility |
|---------------|---------------|
| Not Available | Not Available |

SECTION 13 DISPOSAL CONSIDERATIONS**Waste treatment methods**

| | |
|-------------------------------------|---|
| Product / Packaging disposal | <ul style="list-style-type: none"> ▶ Containers may still present a chemical hazard/ danger when empty. ▶ Return to supplier for reuse/ recycling if possible. Otherwise: <ul style="list-style-type: none"> ▶ If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. ▶ Where possible retain label warnings and MSDS and observe all notices pertaining to the product. |
|-------------------------------------|---|

SECTION 14 TRANSPORT INFORMATION**Labels Required**

| | |
|-------------------------|----|
| Marine Pollutant | NO |
|-------------------------|----|

Land transport (DOT): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION**Safety, health and environmental regulations / legislation specific for the substance or mixture**

| | |
|--|--|
| toluene-2,4-diisocyanate(584-84-9) is found on the following regulatory lists | <p>"US TSCA Section 8 (d) - Health and Safety Data Reporting", "US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): Reactive Materials", "US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants", "US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants", "US NIOSH Recommended Exposure Limits (RELs)", "US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants", "US - California Permissible Exposure Limits for Chemical Contaminants", "US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants", "US - Idaho - Limits for Air Contaminants", "US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs)", "US ACGIH Threshold Limit Values (TLV)", "US - California Occupational Safety and Health Regulations (CAL/OSHA) - Hazardous Substances List", "US DOE Temporary Emergency Exposure Limits (TEELs)", "US OSHA Permissible Exposure Levels (PELs) - Table Z1", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "US Department of Transportation (DOT) List of Hazardous Substances and Reportable Quantities - Hazardous Substances Other Than Radionuclides", "US - Massachusetts Oil & Hazardous Material List", "US - Rhode Island Hazardous Substance List", "US - Pennsylvania - Hazardous Substance List", "US - New York List of Hazardous Substances", "US SARA Section 302 Extremely Hazardous Substances", "US - New Jersey Environmental Hazardous Substances List", "US ACGIH Threshold Limit Values (TLV) - Carcinogens", "US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): Carcinogens", "US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory", "US - Washington Permissible exposure limits of air contaminants", "US - Minnesota Hazardous Substance List", "US NFPA Hazardous Chemical Data Sheets Information", "US - Massachusetts - Right To Know Listed Chemicals", "US - Ohio - Extremely Hazardous Substances - Threshold Quantities", "US - Minnesota Chemicals of High Concern", "US - Massachusetts Toxics Use Reduction Act (TURA) listed chemicals", "US - Alaska Limits for Air Contaminants", "US - Hawaii Air Contaminant Limits", "US - Michigan</p> |
|--|--|

Exposure Limits for Air Contaminants", "US - Oregon Permissible Exposure Limits (Z-1)", "US CAA (Clean Air Act) - HON Rule - Synthetic Organic Chemical Manufacturing Industry Chemicals", "US - Arizona State List of Hazardous Air Pollutants", "US - North Dakota Air Pollutants - Unit Risk Factors", "US - North Dakota Air Pollutants - Guideline Concentrations", "US - Maine Hazardous Air Pollutants List and Reporting Thresholds", "US - Wisconsin Control of Hazardous Pollutants - Substances of Concern for Sources of Incidental Emissions of Hazardous Air Contaminants", "US - Connecticut Hazardous Air Pollutants", "US - Kentucky Listing of Hazardous Air Pollutants", "US EPA Acute Exposure Guideline Levels (AEGs) - Final", "US - California - 22 CCR - Hazardous Wastes and Hazardous Materials - Appendix X", "US CAA (Clean Air Act) - HON Rule - Organic HAPs (Hazardous Air Pollutants)", "US - Wisconsin Control of Hazardous Pollutants - Emission Thresholds, Standards and Control Requirements (Hazardous Air Contaminants)", "US Clean Air Act - Hazardous Air Pollutants", "US - California - Accidental Release Prevention (CalARP) - Table of Toxic Endpoints", "US - California - Accidental Release Prevention (CalARP) - Combined List of Chemicals and Threshold Quantities", "US - Delaware Pollutant Discharge Requirements - Reportable Quantities", "US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values", "Sigma-Aldrich Transport Information", "US California - Aerosol Coating Product Emissions - Maximum Incremental Reactivity (MIR) Values", "US - Louisiana Minimum Emission Rates Toxic Air Pollutants", "Fisher Transport Information", "US - California Toxic Air Contaminant List Category II", "US - Louisiana Toxic Air Pollutant Ambient Air Standards", "International Council of Chemical Associations (ICCA) - High Production Volume List", "US FDA List of "Indirect" Additives Used in Food Contact Substances", "US EPCRA Section 313 Chemical List", "US List of Lists - Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112(r) of the Clean Air Act", "US - New Jersey Right to Know Hazardous Substances (English)", "US FDA Indirect Food Additives: Adhesives and Components of Coatings - Substances for Use Only as Components of Adhesives - Adhesives", "US EPA High Production Volume Program Chemical List", "OECD List of High Production Volume (HPV) Chemicals", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "International Maritime Dangerous Goods Requirements (IMDG Code)", "Belgium Federal Public Service Mobility and Transport, Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (Dutch)", "US Department of Transportation (DOT), Hazardous Material Table", "US Postal Service (USPS) Numerical Listing of Proper Shipping Names by Identification (ID) Number", "US Postal Service (USPS) Hazardous Materials Table: Postal Service Mailability Guide", "International Air Transport Association (IATA) Dangerous Goods Regulations", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "US ACGIH Threshold Limit Values (TLV) - Notice of Intended Changes", "IMO IBC Code Chapter 17: Summary of minimum requirements", "US NTP (National Toxicology Program) - Management Status Report", "US EnviroChem and Cancer Database (ECCD) Chemicals Found to Cause Mammary Tumors in Laboratory Animals by the National Toxicology Program", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "US - California Proposition 65 - Carcinogens", "US National Toxicology Program (NTP) Technical Reports Index", "US - California - Proposition 65 - Priority List for the Development of MADLs for Chemicals Causing Reproductive Toxicity", "US - Vermont Hazardous Constituents", "US EPA Integrated Risk Information System (IRIS)", "US RCRA (Resource Conservation & Recovery Act) - List of Hazardous Wastes", "US - Washington Discarded Chemical Products List - "U" Chemical Products", "US - Washington Dangerous waste constituents list", "US - Vermont Hazardous wastes which are Discarded Commercial Chemical Products or Off-Specification Batches of Commercial Chemical Products or Spill Residues of Either", "US - RCRA (Resource Conservation & Recovery Act) - Appendix VII to Part 261 - Basis for Listing Hazardous Waste", "US - Maine Chemicals of Concern List", "US - Oregon Permissible Exposure Limits (Z-2)", "US NFPA Hazardous Chemical Data Compilation", "US Coast Guard, Department of Homeland Security Part 153: Ships Carrying Bulk Liquid, Liquefied gas or compressed gas hazardous materials. Table 1 to Part 153 --Summary of Minimum Requirements", "US National Toxicology Program (NTP) 12th Report Part A Known to be Human Carcinogens", "US National Toxicology Program (NTP) 12th Report Part B. Reasonably Anticipated to be a Human Carcinogen", "US - California Proposition 65 - No Significant Risk Levels (NSRLs) for Carcinogens", "Germany Recommended Exposure Limits - MAK Values - Carcinogens", "US - California 22 CCR - Toxic Wastes or Toxic Substances", "US - California Air Toxics "Hot Spots" List (Assembly Bill 2588) Substances for Which Emissions Must Be Quantified", "US RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents", "US - RCRA (Resource Conservation Recovery Act) - Basis for Listing Hazardous Waste", "US - California 22 CCR - Appendix VII -Basis for Listing Hazardous Waste"

SECTION 16 OTHER INFORMATION

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net/references

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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