

Era Polymers Pty Ltd

Chemwatch: 9-56458 Version No: 1.1 Safety Data Sheet according to OSHA HazCom Standard (2012) requirements Chemwatch Hazard Alert Code: 2

Issue Date: 07/05/2014 Print Date: 18/06/2014 Initial Date: Not Available S.GHS.USA.EN

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

Product Identifier

| Product name | ERAPOL CC90A - PART A |
|-------------------------------|-----------------------|
| 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 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 prefered 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



GHS Classification

Acute Toxicity (Inhalation) Category 4, Respiratory Sensitizer Category 1, Carcinogen Category 2

Label elements

| GHS label elements | |
|--------------------|--|
|--------------------|--|

SIGNAL WORD DANGER

Hazard statement(s)

| H332 | Harmful if inhaled |
|------|---|
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled |
| H351 | Suspected of causing cancer |

Precautionary statement(s): Prevention

| P101 | If medical advice is needed, have product container or label at hand. |
|------|--|
| P102 | Keep out of reach of children. |
| P103 | Read label before use. |
| P201 | Obtain special instructions before use. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P284 | [In case of inadequate ventilation] wear respiratory protection. |
| | |

Precautionary statement(s): Response

| IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
|--|
| IF exposed or concerned: Get medical advice/attention. |
| If experiencing respiratory symptoms: Call a POISON CENTER/doctor/physician/first aider |
| Call a POISON CENTER/doctor/physician/first aider/if you feel unwell. |
| |
| Store locked up. |
| |
| Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration |
| |

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|---------------|-----------|-------------------------|
| Not Available | >60 | Polyurethane prepolymer |
| 26471-62-5 | <1 | toluene diisocyanate |

SECTION 4 FIRST AID MEASURES

| Description of first aid measures | |
|-----------------------------------|--|
| Eye Contact | If this product comes in contact with eyes: 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 | If skin or hair contact occurs: ► Flush skin and hair with running water (and soap if available). ► Seek medical attention in event of irritation. |
| Inhalation | If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor. 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. |
| Ingestion | 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

| Treat symptomatically. Toluene diisocyanate is a known pulmonary sensitiser. 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

| ▶ Foam. |
|---|
| Dry chemical powder. |
| BCF (where regulations permit). |
| Carbon dioxide. |
| Water spray or fog - Large fires only. |
| |

Special hazards arising from the substrate or mixture

| Fire Incompatibility | Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result |
|----------------------|--|
| | |

Advice for firefighters

| Fire Fighting | Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. |
|-----------------------|---|
| | Avola spraying water onto liquia pools. |
| Fire/Explosion Hazard | Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). May emit acrid smoke. |

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

| Minor Spills | Remove all ignition sources. 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. |
|--------------|---|
| Major Spills | Moderate hazard. 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 | DO NOT allow clothing wet with material to stay in contact with skin 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 enter confined spaces until atmosphere has been checked. |
|-------------------|---|
| Other information | Store in original containers. Keep containers securely sealed. No smoking, naked lights or ignition sources. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. |

Conditions for safe storage, including any incompatibilities

| Suitable container | Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks. |
|-------------------------|--|
| Storage incompatibility | Avoid reaction with oxidising agents NOTE: May develop pressure in containers; open carefully. Vent periodically. Segregate from alcohol, water. |

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|--|-------------------------|---|------------------|------------------|--------------------------|----------------------|
| US OSHA Permissible Exposure Levels (PELs) - Table Z1 | toluene diisocyanate | Toluene-2,4-diisocyanate | Not Available | Not Available | 0.14 mg/m3 / 0.02 ppm | (TDI) |
| US NIOSH Recommended Exposure Limits (RELs) | toluene 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 diisocyanate | 0.25 / 0.005 ppm | 0.02 / 0.75 ppm | 0.083 / 1.5 ppm | 0.51 / 1.5 ppm | |
| | | | | | |
| Ingredient | Original IDLH | | Revised IDLH | | |
| Polyurethane prepolymer | Not Available | | Not Available | | |
| toluene diisocyanate | Not Available | | Not Available | | |

Exposure controls

| Appropriate engineering controls | 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: Process controls which involve changing the way a job activity or process is done to reduce the risk. 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. Ventilation can remove or dilute an air contaminant if designed properly. |
|----------------------------------|---|
| Personal protection | |
| Eye and face protection | 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 lenses 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. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. |
| Skin protection | See Hand protection below |
| Hands/feet protection | 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. 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. Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: |
| Body protection | See Other protection below |
| Other protection | Overalls. P.V.C. apron. Barrier cream. Skin cleansing cream. |
| Thermal hazards | Not Available |

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* selection:

ERAPOL CC90A - PART A

| Material | СРІ |
|------------|-----|
| BUTYL | A |
| PE/EVAL/PE | А |
| PVA | A |

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 | Half-Face Respirator | Full-Face Respirator | Powered Air Respirator |
|-----------------------------------|-------------------------|-------------------------|---------------------------|
| Factor | | | |

| ERAPOL CC90A - PART A | 4 |
|-----------------------|---|
|-----------------------|---|

| SARANEX-23 | Α |
|----------------|---|
| TEFLON | A |
| VITON | A |
| NATURAL RUBBER | В |

* 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: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as

"feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

| 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, light amber | | |
|---|--------------------|---|---------------|
| | | | |
| Physical state | Liquid | Relative density (Water = 1) | 1.06 |
| 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 | Unstable in the 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 | Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful. The material is not thought to produce respiratory irritation (as classified by EC Directives using animal models). Nevertheless inhalation of vapours, fumes or aerosols, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress. Inhalation hazard is increased at higher temperatures. |
|--------------|---|
| Ingestion | The material is not thought to produce adverse health effects following ingestion (as classified by EC Directives using animal models). Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum. High molecular weight material; on single acute exposure would be expected to pass through gastrointestinal tract with little change / absorption. Occasionally accumulation of the solid material within the alimentary tract may result in formation of a bezoar (concretion), producing discomfort. |
| Skin Contact | Skin contact is not thought to produce harmful health effects (as classified under EC Directives using animal models). Systemic harm, however, has been identified following exposure of animals by at least one other route and the material may still produce health damage following entry through wounds, lesions or abrasions. 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. |
| | Continued |

| | 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 CC90A - PART A | ΤΟΧΙΟΙΤΥ | IRRITATION | |
| | Not Available | Not Available | |
| 6-1 | TOXICITY | IRRITATION | |
| toluene dilsocyanate | Not Available | Not Available | |
| ERAPOL CC90A - PART A | 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 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 | ✓ | Carcinogenicity | ✓ |
| | 0 | | 0 |

| Acute Toxicity | × | Carcinogenicity | × |
|-----------------------------------|---|--------------------------|---|
| Skin Irritation/Corrosion | 0 | Reproductivity | 0 |
| Serious Eye Damage/Irritation | 0 | STOT - Single Exposure | 0 |
| Respiratory or Skin sensitisation | ¥ | STOT - Repeated Exposure | 0 |
| Mutagenicity | 0 | Aspiration Hazard | 0 |
| | | | |

CMR STATUS

| CARCINOGEN | toluene diisocyanate US Environmental Defense Scorecard Recognized Carcinogens P65 P65-MC Ca See Appendix A 2B | |
|-------------|---|-----|
| RESPIRATORY | toluene US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs) - diisocyanate Respiratory | |
| SKIN | toluene 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 | Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible. Otherwise: 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. Legislation addressing waste disposal requirements may differ by country, state and/ or territory. |
|------------------------------|---|
| | |

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

Transport in bulk according to Annex II of MARPOL 73 / 78 and the IBC code

| Source | Ingredient | Pollution Category | Residual Concentration - Outside Special Area (% w/w) | Residual Concentration |
|--------------------------|----------------------|--------------------|---|-------------------------------|
| 40-7-4-8-0-0-AA-20140404 | toluene diisocyanate | Y | Not Available | Not Available |

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

| toluene diisocyanate(26471-62-5) is found on the following regulatory lists | "MO MARPOL 7378 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "International Maritime Dangerous Goods Requirements (IMDG Code)", "International Council of Chemical Associations (ICCA) - High Production Volume List", "US - Louisiana Toxic Air Pollutant Ambient Air Standards", "US - California Air Toxics "Hot Spots" List (Assembly Bill 2580) Substances for Which Ernissions Must Be Quantified", "US - New Jersey Right to Know Hazardous Substances (Spanish)", "US - Illinois - Toxic Air Contaminants", "US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants", "US CAA (Clean Air Act) - HON Rule - Synthetic Organic Chemical Manufacturing Industry Chemicals", "US EnviroChem and Cancer Database (ECCD) Chemicals Found to Cause Mammary Tumors in Laboratory Animals by the National Toxicology Program", "US - California 22 CCR - Appendix VII, Basis for Listing Hazardous Waste", "US S Section 8 (d) - Health and Safety Data Reporting", International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "US EPA Integrated Risk Information System (IRIS)", "US - North Carolina Contaminants", "US - Kentucky Listing of Hazardous Air Pollutants", "US - Sotal Service (USPS) Numerical Listing of Proper Shipping Names by Identification (ID) Number", "US Postal Service (USPS) Hazardous Materials Table: Rostal Service Mailability Guide", "US - California - SCAQMD - Toxic Air Contaminants", "US ACGIH Threshold Limit Values (TLV) - Carcinogens", "US - RCRA (Resource Conservation & Recovery Act) - Appendix VII to Part 261 - Basis for Listing Hazardous Waste", "US - Hawaii Air Contaminants Limits", "US National Toxicology Program (NTP) Technical Reports Index", "US - California 2 2 CCR - Toxic Wastes or Toxic Substances", "US - RCRA (Resource Conservation & Recovery Act) - Listist Hazardous Wastes", "US - Hawaii Air Contaminants", "US - Maesaca Chemicas (High Concern", "US Department of Transportation IGOT), Hazardous Wastes or Toxic Substances", "US FDA Indirect Food Addifive |
|--|---|
| | Chemical Products or Spill Residues of Eithert", "US - Ohio Regulated Toxic Chemicals with Thresholds for Accidental Release Prevention", "US - Michigan Air Quality Division List of Screening Levels", "US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants", "US National Toxicology Program (NTP) 12th Report Part B. Reasonably Anticipated to be a Human Carcinogen", "US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): Reactive Materials", "US - Louisiana Minimum Emission Rates Toxic Air Pollutants", "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 - Michigan Exposure Limits for Air Contaminants", "US - Ontaminants", "US - Michigan Exposure Limits for Air Contaminants", "US - Ontaminants", "US - Michigan Exposure Limits for Air Contaminants", "US - Summary of Minimum Requirements", "US - Michigan Exposure Limits for Air Contaminants", "US - Ontaminants", "US - Michigan Exposure Limits for Air Contaminants", "US - Ontaminants", "US - Michigan Exposure Limits for Air Contaminants", "US - Ontaminants", "US - Michigan Exposure Limits for Air Contaminants", "US - Ontaminants", "US - Michigan Exposure Limits for Air Contaminants", "US - Ontaminants", "US - Michigan Exposure Limits for Air Contaminants", "US - Ontaminants", "US - Michigan Exposure Limits for Air Contaminants", "US - Ontaminants", "US - Michigan Exposure Limits for Air Contaminants", "US - Michigan Exposure Limits for Air |
| | Oregon Permissible Exposure Limits (2-2)", "US NFPA Hazardous Chemical Data Compilation", "US - Minnesota Hazardous Substance List", "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 California - Aerosol Coating Product Emissions - Maximum Incremental Reactivity (MIR) Values", "US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values", "US - Washington Permissible exposure limits of air contaminants", "US NIOSH Recommended Exposure Limits (RELs)", "US - North Dakota Air Pollutants - Guideline Concentrations", "US DOE Temporary Emergency Exposure Limits (TEELs)", "US - Alaska Limits for Air Contaminants", "US - Maine Hazardous Air Pollutants List and Reporting Thresholds", "US - Kentucky Categories of Toxic Air Contaminants", "US List of Lists - Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112(r) of the Clean Air Act", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "Sigma-AldrichTransport Information", "OECD Existing Chemicals Database", "US - Rhode Island Hazardous Substance List", "US NFPA Fire Hazard Properties of Flammable Liquids, Gases, and Volatile Solids Table", "US - California Proposition 65 - Carcinogens", "US - Washington Discarded Chemical Products List - "U" Chemical Products", "US - California Proposition 65 - Carcinogens", "US - Washington Discarded Chemical Products List - "U" Chemical Products", "US - California Proposition 65 - Carcinogens", "US - Washington Discarded Chemical Products List - "U" Chemical Products", "US - California Proposition 65 - Carcinogens", "US - Washington Discarded Chemical Products List - "U" Chemical Products", "US - California Proposition 65 - Carcinogens", "US - Washington Discarded Chemical Products List - "U" Chemical Products", "US - California Proposition 65 - Carcinogens", "US - Washington Discarded Chemical Products L |
| | Quantities","US National Toxicology Program (NTP) 12th Report Part A Known to be Human Carcinogens","US ACGIH Threshold Limit Values (TLV) - Notice of Intended Changes","International Air Transport Association (IATA) Dangerous Goods Regulations","GESAMP/EHS Composite List - GESAMP Hazard Profiles","US - Maine Chemicals of Concern List","US - California Toxic Air Contaminant List Category II","US - Washington Dangerous waste constituents list","US SARA Section 302 Extremely Hazardous Substances","US - Ohio - Extremely |

Hazardous Substances - Threshold Quantities", "US RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents", "US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants", "US - Massachusetts - Right To Know Listed Chemicals", "US FDA List of "Indirect" Additives Used in Food Contact Substances", "US ACGIH Threshold Limit Values (TLV)", "US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs)", "IMO IBC Code Chapter 17: Summary of minimum requirements", "US OSHA Permissible Exposure Levels (PELs) - Table Z1", "US - Connecticut Hazardous Air Pollutants", "US EPA High Production Volume Program Chemical List", "US - Michigan Polluting Materials List", "US EPA Acute Exposure Guideline Levels (AEGLs) -Final", "US Clean Air Act - Hazardous Air Pollutants", "US - Massachusetts Oil & Hazardous Material List", "US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory", "US Department of Transportation (DOT) List of Hazardous Substances and Reportable Quantities -Hazardous Substances Other Than Radionuclides", "US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants", "US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): Carcinogens", "US - Wisconsin Control of Hazardous Substance List"

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 Chernwatch 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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