

1. Substance/preparation and manufacturer/supplier identification

DRI-GARD UV920 - PART B

Use: Product for construction chemicals

Manufacturer/supplier:

DRITECH CHEMICALS SDN. BHD. 27-9, OVAL DAMANSARA, 685, JALAN DAMANSARA, 60000, KUALA LUMPUR,. MALAYSIA.

Telephone: +60 3 9212 8510 Telefax number: +60 3 9212 8519

Emergency information:

Emergency Advice Number: +60 3 9212 8510

2. Hazard identification

HAZARDOUS CHEMICAL

Classification of the substance and mixture: Acute toxicity: Cat. 4 (Inhalation - mist)

Skin corrosion/irritation: Cat. 2

Serious eye damage/eye irritation: Cat. 2A

Respiratory sensitization: Cat. 1 Skin sensitization: Cat. 1 Carcinogenicity: Cat. 2

Specific target organ toxicity — single exposure: Cat. 3 (irritating to respiratory system)
Specific target organ toxicity — repeated exposure (Olfactory organs): Cat. 2 (by inhalation)

Label elements and precautionary statement:

Pictogram:





Signal Word: Danger

Hazard Statement:

Causes serious eye irritation. Causes skin irritation. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause respiratory irritation. Suspected of causing cancer. May cause damage to organs (Olfactory organs) through prolonged or repeated exposure (inhalation).

Precautionary Statements (Prevention):

Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Do not breathe dust/gas/mist/vapours. Obtain special instructions before use. Avoid breathing mist. Do not handle until all safety precautions have been read and understood. [In case of inadequate ventilation] wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):



IF exposed or concerned: Call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell. IF ON SKIN (or hair): Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If eye irritation persists: Call a POISON CENTER or doctor/physician.

Precautionary Statements (Storage):

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Precautionary Statements (Disposal):

Dispose of contents/container to hazardous or special waste collection point.

Other hazards which do not result in classification:

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. Composition/information on ingredients

Chemical nature

Blend based on: isocyanate

Hazardous ingredients

First-Aid Measures

General advice:

First aid personnel should pay attention to their own safety. Immediately remove contaminated clothing.

If inhaled:

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

On skin contact:

After contact with skin, wash immediately with plenty of water and soap. Under no circumstances should organic solvent be used. If irritation develops, seek medical attention.

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

Rinse mouth immediately and then drink plenty of water, seek medical attention. Do not induce vomiting unless told to by a poison control center or doctor.

Note to physician:

Hazards: Respiratory sensitization may result in allergic (asthma-like) signs in the lower respiratory tract including wheezing, shortness of breath and difficulty breathing, the onset of which may be delayed. Repeated inhalation of high concentrations may cause lung damage, including reduced lung function, which may be permanent. Substances eliciting lower respiratory tract irritation may worsen the asthma-like reactions that may be produced by product exposures.

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.



4. Fire-Fighting Measures

Suitable extinguishing media:

foam, water spray, dry powder, carbon dioxide

Unsuitable extinguishing media for safety reasons:

water jet

Specific hazards:

carbon dioxide, carbon monoxide, harmful vapours, nitrogen oxides, fumes/smoke, carbon black

Special protective equipment:

Wear a self-contained breathing apparatus.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. If exposed to fire, keep containers cool by spraying with water. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Contaminated extinguishing water must be disposed of in accordance with official regulations.

5. Accidental Release Measures

Personal precautions:

Do not breathe vapour/aerosol/spray mists. Wear eye/face protection. If exposed to high vapour concentration, leave area immediately. Use personal protective clothing. Handle in accordance with good building materials hygiene and safety practice.

Environmental precautions:

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:

For small amounts: Pick up with inert absorbent material (e.g. sand, earth etc.). Dispose of contaminated material as prescribed. For large amounts: Pump off product.

6. Handling and Storage

Handling

Avoid aerosol formation. Avoid inhalation of mists/vapours. Avoid skin contact. No special measures necessary provided product is used correctly.

Storage

Suitable materials for containers: High density polyethylene (HDPE), Carbon steel (Iron) Further information on storage conditions: Keep only in the original container in a cool, dry, wellventilated place away from ignition sources, heat or flame. Protect from direct sunlight. Protect from temperatures below: 5 °C

The product crystallizes below the limit temperature.

Protect from temperatures above: 30 °C

With longer exceeding of the indicated temperature packagings may be damaged.

7. Exposure controls and personal protection

Components with occupational exposure limits

Diphenylmethane-4,4'-diisocyanate (MDI), 101-68-8;

STEL value 0.07 mg/m3 (OEL (AU))

TWA value 0.02 mg/m3 (OEL (AU))

TWA value 0.02 mg/m3 (AU NOEL)

STEL value 0.07 mg/m3 (AU NOEL)

STEL value 0.07 mg/m3 (AU NOEL)

TWA value 0.02 mg/m3 (AU NOEL)

TWA value 0.005 ppm (ACGIHTLV)

Benzene, 1,1'-methylenebis[2-isocyanato-, 2536-05-2;

TWA value 0.02 mg/m3 (OEL (AU))

Measured as: NCO

STEL value 0.07 mg/m3 (OEL (AU)) Measured as: NCO TWA value 0.02 mg/m3 (AU NOEL) Measured as: NCO STEL value 0.07 mg/m3 (AU NOEL) Measured as: NCO

diphenylmethane-2,4'-diisocyanate, 5873-54-1;

STEL value 0.07 mg/m3 (OEL (AU)) Measured as: NCO

TWA value 0.02 mg/m3 (OEL (AU)) Measured as: NCO

TWA value 0.02 mg/m3 (AU NOEL) Measured as: NCO

STEL value 0.07 mg/m3 (AU NOEL) Measured as: NCO

Isocyanic acid, polymethylenepolyphenylene ester (P-MDI), 9016-87-9;

STEL value 0.07 mg/m3 (OEL (AU)) Measured as: NCO

TWA value 0.02 mg/m3 (OEL (AU)) Measured as: NCO

STEL value 0.07 mg/m3 (OEL (AU))

TWA value 0.02 mg/m3 (OEL (AU))

STEL value 0.07 mg/m3 (AU NOEL) Measured as: NCO

TWA value 0.02 mg/m3 (AU NOEL) Measured as: NCO

TWA value 0.02 mg/m3 (AU NOEL)

STEL value 0.07 mg/m3 (AU NOEL)

TWA value 0.005 ppm (ACGIHTLV)

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Combination filter for gases/vapours of organic, inorganic, acid inorganic and alkaline compounds (e.g. EN 14387 Type ABEK).

Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact



(Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc. Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:

Do not inhale gases/vapours/aerosols. Avoid contact with the skin, eyes and clothing. Avoid exposure - obtain special instructions before use. Handle in accordance with good building materials hygiene and safety practice. Wearing of closed work clothing is recommended. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks).

8. Physical and Chemical Properties

Form: liquid

Colour: Clear amber colour

Odour: characteristic

Odour threshold: No applicable information available.

pH value:

slightly alkaline

Melting temperature:

not applicable

Boiling point: approx. 350 °C (1,013

hPa)

Flash point: $> 200 \,^{\circ}\text{C}$ (DIN 53213-1)

Evaporation rate:

not determined

Ignition temperature: > 400 °C

Thermal decomposition: No decomposition if stored and handled as

prescribed/indicated.

Explosion hazard: not explosive

Density: approx. 1.24 g/cm3

(20 °C)

Relative vapour density (air):

not determined

Solubility in water: not soluble

(20 °C)

Miscibility with water:

(20 °C) immiscible

Viscosity, dynamic: approx. 90 - 300 mPa.s

(23 °C)

Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

9. Stability and Reactivity

Conditions to avoid:

See MSDS section 7 - Handling and storage.

Thermal decomposition: No decomposition if stored and handled as

prescribed/indicated.

Substances to avoid: strong acids, strong bases, strong oxidizing agents,

strong reducing agents

Corrosion to metals: No corrosive effect on metal.

Hazardous reactions:

The product is stable if stored and handled as prescribed/indicated.

No hazardous decomposition products if stored and handled as prescribed/indicated.

10. Toxicological Information

Acute toxicity

Assessment of acute toxicity:

Of moderate toxicity after short-term inhalation. Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Irritation

Assessment of irritating effects:

Eye contact causes irritation. Skin contact causes irritation.

Respiratory/Skin sensitization

Assessment of sensitization:

Sensitization after skin contact possible. The substance may cause sensitization of the respiratory tract. Studies in animals suggest that dermal exposure may lead to pulmonary sensitization. However, the relevance of this result for humans is unclear.

Germ cell mutagenicity

Assessment of mutagenicity:

Results from a number of mutagenicity studies with microorganisms, mammalian cell culture and mammals are available. Taking into account all of the information, there is no indication that the substance is mutagenic.

Carcinogenicity

Assessment of carcinogenicity:

Indication of possible carcinogenic effect in animal tests. A carcinogenic effect cannot safely be ruled out. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Reproductive toxicity

Assessment of reproduction toxicity:

No effects have been reported in reproductive organs in long term animal studies.

Developmental toxicity

Assessment of teratogenicity:

The substance did not cause malformations in animal studies; however, toxicity to development was observed at high doses that were toxic to the parental animals.

Only for professional users.

Contains isocyanates. Observe manufacturer's instructions.

Specific target organ toxicity (single exposure):

Assessment of STOT single:

Causes temporary irritation of the respiratory tract.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

Repeated inhalation exposure may affect certain organs. After repeated exposure the prominent effect is local irritation. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Other relevant toxicity information

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

11. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Mobility

Assessment transport between environmental compartments:

The substance will not evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is not expected.

Persistence and degradability

Assessment biodegradation and elimination (H2O): Not readily biodegradable (by OECD criteria).

Bioaccumulation potential

Assessment bioaccumulation potential:

Based on a weight of evidence, the compound will not bioaccumulate.

Additional information

Other ecotoxicological advice:

There is a high probability that the product is not acutely harmful to aquatic organisms. Do not discharge product into the environment without control. The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

12. Disposal Considerations

Observe national and local legal requirements.

Residues should be disposed of in the same manner as the substance/product.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

13. Transport Information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT	PAINT
Transport	3	3	3	3	3
hazard class(es)					
Packing group	III	III	III	III	III
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-		-	-	Emergency schedules F-E, S- E
	ERG No.	ERG No.	ERG No.		
	128	128	128		

14. Regulatory Information

Poisons Schedule: Not scheduled

Other Regulations

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

Registration status:

AICS, AU released / listed

Other Information:

In addition to the information given in the safety data sheet we refer to the product specific 'Technical Information'.

Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed