SAFETY DATA SHEET

HARDENER UT-R20

Infosafe No.: LQ0B1
ISSUED Date : 08/11/2021
ISSUED by: Rema Tip Top Australia Pty. Limited

Section 1 - Identification

Product Identifier
HARDENER UT-R20

Company Product Codes / Numbers / Unique Identifiers
5251036, 5251044

Company Name
Rema Tip Top Australia Pty. Limited (ABN 32003380827)

Address
Bldg 3, 20 Worth Street Chullora
NSW 2190 AUSTRALIA

Telephone/Fax Number
Tel: +61(0)2 8755 8400
Fax: +61(0)2 9742 3296

Emergency Phone Number
1800 638 556

Recommended use of the chemical and restrictions on use
Hardener - for professional use.

Section 2 - Hazard(s) Identification

GHS classification of the substance/mixture
Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.
Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)
Acute toxicity: Category 2 - Inhalation
Carcinogenicity: Category 2
Eye damage/irritation: Category 2A
Flammable liquids: Category 4
Sensitisation - respiratory: Category 1
Sensitisation - skin: Category 1
Skin corrosion/irritation: Category 2
Specific target organ toxicity (repeated exposure): Category 1
Specific target organ toxicity (single exposure): Category 3 (Narcotic)
Specific target organ toxicity (single exposure): Category 3 (Respiratory tract irritation)

Signal Word (s)
DANGER

Hazard Statement (s)
H227 Combustible liquid.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H372 Causes damage to organs through prolonged or repeated exposure.

Pictogram (s)
Skull and crossbones,Health hazard

Precautionary Statement – Prevention
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P284 [In case of inadequate ventilation] wear respiratory protection.

Precautionary Statement – Response
P302+P352 IF ON SKIN: Wash with plenty of water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P362+P364 Take off contaminated clothing and wash it before reuse.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310 Immediately call a POISON CENTER/doctor.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P370+P378 In case of fire: Use foam, carbon dioxide (CO2), dry chemical, water spray to extinguish.

Precautionary Statement – Storage
P403 Store in a well-ventilated place.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Precautionary Statement – Disposal
P501 Dispose of contents/container to an approved waste disposal plant.

Section 3 - Composition and Information on Ingredients

Ingredients

Name	CAS	Proportion
dichloromethane	75-09-2	60-<85 %
Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9	20-<30 %

Section 4 - First Aid Measures

Inhalation
Avoid becoming a casualty - to protect rescuer, use air-viva, oxy-viva or one-way mask. Remove affected person from contaminated area - Apply artificial respiration if not breathing. Do not give direct mouth to mouth resuscitation. Resuscitate in a well ventilated area. Seek IMMEDIATE medical attention.

Ingestion
Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

Skin
Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard. Seek medical attention.

Eye
If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. Seek medical attention.

First Aid Facilities
Eyewash, safety shower and normal washroom facilities.

Advice to Doctor
Treat symptomatically.

Other Information
For advice in an emergency, contact a Poisons Information Centre or a doctor at once. (131 126)

Section 5 - Firefighting Measures

Suitable Extinguishing Media
Foam, carbon dioxide (CO_2), dry chemical, water spray.

Unsuitable Extinguishing Media
Do not use water jet.

Hazards from Combustion Products
Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide, oxides of nitrogen, chlorine, hydrogen chloride gas, traces of phosgene and hydrogen cyanide.

Specific hazards arising from the chemical
Combustible. This product will burn if exposed to fire.

Hazchem Code
2X

Decomposition Temperature
>120 °C

Precautions in connection with Fire
Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers. Fight fire from safe location. This product should be prevented from entering drains and watercourses.

Section 6 - Accidental Release Measures

Emergency Procedures
Remove all sources of ignition. Evacuate all unprotected personnel. Do not allow contact with skin and eyes. Do not breathe mist/vapour. It is essential to wear self-contained breathing apparatus (S.C.B.A) and full personal protective equipment and clothing to prevent exposure. Avoid exposure to spillage by collecting the material using explosion proof vacuum and transfer into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

Section 7 - Handling and Storage

Precautions for Safe Handling
Toxic and combustible liquid. Avoid exposure. Exposure without protection must be prevented. Wear appropriate personal protective equipment and clothing to prevent exposure. Use in designated areas with local exhaust ventilation. DO NOT store or use in confined spaces. Build up of mists or vapours in the atmosphere must be prevented. Avoid breathing in spray or mists or vapours. Do not use near ignition sources. Do not pressurise, cut, heat or weld containers as they may contain toxic residues.. Do not empty into drains. Maintain high standards of personal hygiene i.e. washing hands prior to eating, drinking, smoking or using toilet facilities. Avoid exposure. Do not handle until all safety precautions have been read and understood.

Conditions for safe storage, including any incompatibilities
This material is Toxic and must be stored, handled and maintained according to the appropriate regulations. Limit quantity in storage. Restrict access to storage area. Post appropriate warning signs. Consider leak detection and alarm systems, as required. Structural materials and lighting and ventilation systems in storage area should be corrosion resistant. Store in a cool, dry, well-ventilated area away from sources of ignition, oxidizing agents, strong mineral acids, bases metal and/or water.
Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations.

For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids and AS/NZS 4452 - The storage and handling of toxic substances.

Storage Regulations
Classified as a Class C1(COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS1940-2017.

Storage Temperatures
Avoid temperatures above 40°C.

Section 8 - Exposure Controls and Personal Protection

Occupational exposure limit values
No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Dichloromethane
TWA: 50 ppm
TWA: 174 mg/m³
Notice: Sk, Carc.2

Isocyanates (as NCO):
TWA: 0.02 mg/m³
STEL: 0.07 mg/m³
Notice: Sen

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.
STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.
'Sk' Notice: Absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.
'Sen' Notice: The substance may cause sensitization by skin contact or by inhalation
Carc.2: Suspected human carcinogen.
Source: Safe Work Australia

Biological Monitoring
Name: Dichloromethane
Determinant: Dichloromethane in urine
Value: 0.3mg/l

Sampling time: End of shift
Notation: Sq
Source: American Conference of Industrial Hygienists (ACGIH)

Control Banding
Not available

Engineering Controls
This substance is toxic and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. Provide sufficient ventilation to keep airborne levels below the exposure limits or as low as possible. Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flameproof exhaust ventilation system is required. Alternatively, a process enclosure system such as a fume cupboard should be employed.

Respiratory Protection
If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.
Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye and Face Protection
Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations.
Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 (series) - Eye Protectors for Industrial Applications.

Hand Protection
Wear gloves of impervious material such as viton (Minimum coat thickness 0.7 mm, permeation resistance (wear duration) approx. 120 minutes.). Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Thermal Hazards
No further relevant information available.

Body Protection
Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Section 9 - Physical and Chemical Properties

Properties	Description	Properties	Description
Form	Liquid	**Appearance**	Liquid
Colour	Amber	**Odour**	Characteristic
Melting Point	Not available	**Boiling Point**	Not available
Decomposition Temperature	>120 °C	**Solubility in Water**	Reacts with water
Specific Gravity	Not available	**pH**	Not available
Vapour Pressure	4.53 hPa (20°C)	**Relative Vapour Density (Air=1)**	Not available
Evaporation Rate	Not available	**Odour Threshold**	Not available
Viscosity	Not available	**Partition Coefficient: n-octanol/water (log value)**	Not available
Density	1.26 g/cm³ @ 20°C	**Flash Point**	>61°C
Flammability	Combustible liquid	**Auto-Ignition Temperature**	Not available
Flammable Limits - Lower	Not available	**Flammable Limits - Upper**	Not available

Section 10 - Stability and Reactivity

Reactivity
Not available

Chemical Stability
Stable under normal conditions of storage and handling.

Possibility of hazardous reactions
Reactions with strong acids and alkalis.
Reactions with alkali metals.

Conditions to Avoid
Heat, open flames, sparks and other sources of ignition.

Incompatible Materials
Water, amines, alcohols, strong bases, strong acids and alkaline metals.

Hazardous Decomposition Products
Thermal decomposition may result in the release of toxic and/or irritating fumes including: carbon monoxide, carbon dioxide, oxides of nitrogen, chlorine, hydrogen chloride gas, phosgene and hydrogen cyanide.

Hazardous Polymerization
Not available

Section 11 - Toxicological Information

Toxicology Information
No toxicity data is available for this material.

Ingestion
Ingestion of this product may irritate the gastric tract causing nausea and vomiting. Ingestion of large quantities may depress the central nervous system.

Inhalation
Fatal if inhaled. Inhalation may cause headaches, impairment of judgement and in extreme cases can lead to unconsciousness or death.
May cause respiratory irritation.Inhalation of product vapours can cause irritation of the nose, throat and respiratory system. May cause irritation to the mucous membrane and upper airways, especially where vapours or mists are generated. Symptoms include sneezing, coughing, wheezing, shortness of breath, headache, dizziness, drowsiness, nausea and vomiting.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin
Causes skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis. May cause an allergic skin reaction.

Eye
Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

Respiratory Sensitisation
May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Sensitisation
May cause an allergic skin reaction.

Germ Cell Mutagenicity
Not considered to be a mutagenic hazard.

Carcinogenicity
Suspected of causing cancer. Classified as a suspected human carcinogen.
Dichloromethane is listed as a Group 2A: Probably carcinogenic to humans according to International Agency for Research on Cancer (IARC).
Isocyanic acid, polymethylenepolyphenylene ester is listed as a Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

Reproductive Toxicity
Not considered to be toxic to reproduction.

STOT - Single Exposure
May cause respiratory irritation. May cause drowsiness or dizziness.

STOT - Repeated Exposure
Causes damage to organs through prolonged or repeated exposure.

Aspiration Hazard
Not expected to be an aspiration hazard.

Other Information
Inhalation of high vapour concentration may cause symptoms like headache, dizziness, tiredness, nausea, and vomiting.
Hazard of lung oedema.
With hypersensitive people, reactions as cough or difficulty of breathing may appear even with tiny concentrations of isocyanates; therefore keep room aerated and ventilated.

Section 12 - Ecological Information

Ecotoxicity
No ecological data available for this material.

Persistence and degradability
Not available

Mobility
Reacts with water

Bioaccumulative Potential
Not available

Other Adverse Effects
Hazardous water pollutant

Environmental Protection
Do not discharge this material into waterways, drains and sewers.

Hazardous to the Ozone Layer
This product is not expected to deplete the ozone layer.

Section 13 - Disposal Considerations

Disposal Considerations
The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations. To minimise personal exposure, refer to Section 8 - Exposure Controls and Personal Protection.

Section 14 - Transport Information

Transport Information
Road and Rail Transport:
This material is classified as Dangerous Goods Division 6.1 Toxic Substance according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th Edition).
Class 6 Dangerous Goods are incompatible in a placard load with any of the following:
- Class 1, Explosives
- Class 3, Flammable Liquids, if the Class 3 dangerous goods are nitromethane
- Class 5, Oxidizing Substances and Organic Peroxides, if the Class 6 material is a fire risk substance
- Class 8, Corrosive Substances, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids

And are incompatible with food and food packaging in any quantity.

Marine Transport (IMO/IMDG):
Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.
Class/Division: 6.1
UN No: 2810
Proper Shipping Name: TOXIC LIQUID, ORGANIC, N.O.S. (Contains dichloromethane & isocyanic acid, polymethylenepolyphenylene

ester)
Packing Group: II
EMS : F-A, S-A
Special Provisions: 274

Air Transport (ICAO/IATA):
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.
Class/Division: 6.1
UN No: 2810
Proper Shipping Name: Toxic liquid, organic, n.o.s. (Contains dichloromethane & isocyanic acid, polymethylenepolyphenylene ester)

Packing Group: II
Packaging Instructions (passenger & cargo): 654
Packaging Instructions (cargo only): 662
Hazard Labels: Toxic
Special Provisions: A3, A4, A137

ADG U.N. Number
2810

ADG Proper Shipping Name
TOXIC LIQUID, ORGANIC, N.O.S.(Contains dichloromethane & isocyanic acid, polymethylenepolyphenylene ester)

ADG Transport Hazard Class
6.1

ADG Packing Group
II

Hazchem Code
2X

IERG Number
36

Special Precautions for User
Not available

IMDG Marine pollutant
No

Transport in Bulk
Not available

Section 15 - Regulatory Information

Regulatory Information
Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.
Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Poisons Schedule
S6

Montreal Protocol
Not listed

Stockholm Convention
Not listed

Rotterdam Convention
Not listed

International Convention for the Prevention of Pollution from Ships (MARPOL)
Not available

Agricultural and Veterinary Chemicals Act 1994
Not available

Basel Convention
Not available

Section 16 - Any Other Relevant Information

Date of Preparation
SDS reviewed: November 2021
Supersedes: August 2016

Version Number
Version 3.0

Literature References
Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.
Standard for the Uniform Scheduling of Medicines and Poisons.
Australian Code for the Transport of Dangerous Goods by Road & Rail.
Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
Code of Practice for Supply Diversion into Illicit Drug Manufacture.
National Code of Practice for Chemicals of Security Concern.
Agricultural Compounds and Veterinary Chemicals Act.
International Agency for Research on Cancer (IARC) Monographs.
Montreal Protocol on Substances that Deplete the Ozone Layer.
Stockholm Convention on Persistent Organic Pollutants (POPs).
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.
International Air Transport Association (IATA) Dangerous Goods Regulations.
International Maritime Dangerous Goods (IMDG) Code.
Workplace exposure standards for airborne contaminants.
Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).
Globally Harmonised System of Classification and Labelling of Chemicals.
Code of Practice: Managing Noise and Preventing Hearing Loss at Work.

Contact Person/Point
Technical Manager
Ph: (02) 8755 8400

END OF SDS