

SAFETY DATA SHEET

HARDENER E 40

Infosafe No.: 4AD6R
ISSUED Date : 12/12/2022
ISSUED by: Rema Tip Top Australia Pty. Limited

Section 1 - Identification

Product Identifier

HARDENER E 40

Product Code

5251067,5251122

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
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Emergency Phone Number

1800 638 556

Recommended use of the chemical and restrictions on use

Hardener.

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)

Flammable liquids: Category 2

Eye damage/irritation: Category 2A

Specific target organ toxicity (single exposure): Category 3 (Narcotic)

Signal Word (s)

DANGER

Hazard Statement (s)

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Pictogram (s)

Exclamation mark, Flame

**Precautionary Statement – Prevention**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statement – Response

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
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.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTER/doctor if you feel unwell.
P370+P378 In case of fire: Use carbon dioxide, dry chemical or foam (preferably alcohol resistant foam) to extinguish.

Precautionary Statement – Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
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
Ethyl acetate	141- 78- 6	> 70- 100 %
Tris(4- isocyanatophenyl) thiophosphate	4151- 51- 3	1- 30 %
Chlorobenzene	108- 90- 7	0- <2. 5 %
Ingredients determined not to be hazardous.		Balance

Section 4 - First Aid Measures

Inhalation

If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion

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

Skin

Wash affected area thoroughly with soap and water. If symptoms develop 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 (Phone Australia 131 126) or a doctor at once.

Section 5 - Firefighting Measures

Suitable Extinguishing Media

Use carbon dioxide, dry chemical or foam. Alcohol resistant foam is preferred. If not available normal foam can be used.

Unsuitable Extinguishing Media

Do not use water jet.

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes including carbon dioxide and carbon monoxide, oxides of phosphorous and nitrogen, chlorinated hydrocarbons, hydrogen cyanide (HCN) and Isocyanates (NCO).

Specific hazards arising from the chemical

Highly flammable liquid and vapour. Vapour/air mixtures may ignite explosively. Flashback along the vapour trail may occur. Runoff to sewer may create fire or explosion hazard.

Hazchem Code

•3YE

Decomposition Temperature

Not available

Precautions in connection with Fire

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering drains and watercourses.

Section 6 - Accidental Release Measures

Emergency Procedures

Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the 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

Wear appropriate personal protective equipment and clothing to prevent exposure. Handle and use the material in a well-ventilated area, away from sparks, flames and other ignition sources. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Work from suitable, labelled, fire-resistant containers. Open containers carefully as they may be under pressure. Keep containers tightly closed. Flameproof equipment is necessary in areas where the product is being used. Take precautionary measures against static discharges. Earth or bond all equipment. Do not empty into drains. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands before eating, drinking, smoking or using the toilet facilities.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area away from sources of ignition, foodstuffs, clothing and incompatible materials such as oxidising agents. 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.

Corrosiveness

Not corrosive to aluminium.

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:

Chlorobenzene
TWA: 10 ppm, 46 mg/m³

Ethyl acetate
TWA: 200 ppm, 720 mg/m³
STEL: 400 ppm, 1440 mg/m³

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.
Source: Safe Work Australia

Biological Monitoring
Name: Chlorobenzene [108-90-7]
Determinant: 4-Chlorocatechol in urine
Value: 100 mg/g creatinine
Determinant: p-Chlorophenol in urine
Value: 20 mg/g creatinine
Sampling time: End of shift at end of workweek
Notation: Ns
Source: American Conference of Industrial Hygienists (ACGIH)

Control Banding
Not available

Engineering Controls
This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn. Refer to relevant regulations for further information concerning ventilation requirements.
Refer to AS 1940 - The storage and handling of flammable and combustible liquids and AS/NZS 60079.10.1 Explosive atmospheres - Classification of areas - Explosive gas atmospheres, for further information concerning ventilation requirements.

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. 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	Yellowy-brown liquid
Colour	Yellowy-brown	Odour	Ester-like odour
Melting Point	Not available	Boiling Point	77°C
Decomposition Temperature	Not available	Solubility in Water	Reacts with water.
Specific Gravity	1 (water=1)	pH	Not available
Vapour Pressure	97 mbar at 20°C	Relative Vapour Density (Air=1)	Not available
Evaporation Rate	Not available	Odour Threshold	Not available
Viscosity	Not available	Volatile Component	Not available
Partition Coefficient: n-octanol/water (log value)	Not available	Flash Point	-5°C
Flammability	Highly flammable	Auto-Ignition Temperature	Not available
Flammable Limits - Lower	2.1% v/v	Flammable Limits - Upper	11.5% v/v
Explosion Properties	Not available	Oxidising Properties	Not available
Particle Size	Not available		

Section 10 - Stability and Reactivity

Reactivity

Reacts with incompatible materials.

Chemical Stability

Stable under normal conditions of storage and handling.

Possibility of hazardous reactions

Container can be pressurised by carbon dioxide due to reaction with humid air and/or water.

Conditions to Avoid

Heat, flames and other sources of ignition. Container can be pressurised by carbon dioxide due to reaction with humid air and/or water.

Incompatible Materials

Strong oxidising agents, acids and bases, amines and alcohols and water/humidity.

Hazardous Decomposition Products

Thermal decomposition may result in the release of toxic and/or irritating fumes including carbon monoxide, carbon dioxide, hydrogen chloride gas, oxides of phosphorous and nitrogen, isocyanates, and chlorinated hydrocarbon.

Hazardous Polymerization

Not available.

Section 11 - Toxicological Information

Toxicology Information

No toxicity data available for this product.

Ingestion

Ingestion of this product may irritate the gastric tract causing nausea and vomiting.

Inhalation

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.

Skin

May be irritating to skin. The symptoms may include redness, itching and swelling.

Eye

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

Respiratory Sensitisation

Not expected to be a respiratory sensitizer.

Skin Sensitisation

Not expected to be a skin sensitizer.

Germ Cell Mutagenicity

Not considered to be a mutagenic hazard.

Carcinogenicity

Not considered to be a carcinogenic hazard.

Reproductive Toxicity

Not considered to be toxic to reproduction.

STOT - Single Exposure

May cause drowsiness or dizziness.

STOT - Repeated Exposure

Not expected to cause toxicity to a specific target organ through repeated or prolonged exposure.

Aspiration Hazard

Not expected to be an aspiration hazard.

Section 12 - Ecological Information

Ecotoxicity

No ecological data are available for this material.

Persistence and degradability

Not available

Mobility

Not available

Environmental Fate

Not available

Bioaccumulative Potential

Not available

Other Adverse Effects

Not available

Environmental Protection

Do not allow product to enter drains, waterways or sewers.

Hazardous to the Ozone Layer

This product is not expected to deplete the ozone layer.

Section 13 - Disposal Considerations

Disposal Considerations

Dispose of waste according to applicable local and national regulations. Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near containers. Empty containers may contain flammable residues. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers. Advise flammable nature. To minimise personal exposure, refer to Section 8 - Exposure Controls and Personal Protection.

Section 14 - Transport Information

Transport Information

Road and Rail Transport (ADG7):

This material is a Class 3 - Flammable Liquid according to The Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Class 3 - Flammable Liquids are incompatible in a placard load with any of the following:

- Class 1: Explosives

- Division 2.1: Flammable Gases.

(Division 2.1 and Class 3 are incompatible in transport if both are in tanks or other receptacles with a capacity individually exceeding 500 L)

- Division 2.3: Toxic Gases

- Division 4.2: Spontaneously Combustible Substances

- Division 5.1: Oxidising substances

- Division 5.2: Organic Peroxides
- Class 6: Toxic or Infectious Substances
(where the flammable liquid is nitromethane)
- Class 7: Radioactive materials unless specifically exempted

Marine Transport (IMO/IMDG):

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN-No: 1133

Proper Shipping Name: ADHESIVES containing flammable liquid

Class: 3

Packaging Group: II

EMS: F-E, S-D

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.

UN-No: 1133

Proper Shipping Name: Adhesives containing flammable liquid

Class: 3

Packaging Group: II

Packaging Instructions (passenger & cargo): 353

Packaging Instructions (cargo): 364

Label: Flammable Liquid

Special provisions: A3

ADG U.N. Number

1133

ADG Proper Shipping Name

ADHESIVES containing flammable liquid

ADG Transport Hazard Class

3

ADG Packing Group

II

Hazchem Code

•3YE

IERG Number

14

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.

Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Poisons Schedule

Not Scheduled

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: December 2022

Superseded: January 2019

Version Number

4.0

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 (7th revised edition).

Code of Practice: Managing Noise and Preventing Hearing Loss at Work.

Contact Person/Point

Technical Manager

Ph: (02) 8755 8400

END OF SDS

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