

MATERIALS SAFETY DATA SHEET

RUBBER PRIMER

PART A

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

PRODUCT NAME: WENCO RUBBER PRIMER ETCH – PART A
 PRODUCT CODE: 7112639
 RECOMMENDED USE: Halogenated Primer for rubber surfaces. Part A of two part system.

SUPPLIER: Wenco Pty Ltd
 1 Ladner Street, O'connor, WA, 6163
 Phone/Fax: 08 9267 5509
 sales@wencomining.com | wencomining.com

Emergency Phone: 0487 936 266

2. HAZARD IDENTIFICATION

AUSTRALIA CLASSIFICATION

This material is hazardous according to health criteria of Safe Work Australia.

Hazard Category:

Xi Irritant

Risk Phrase(s):

R36: Irritating to eyes.
 R66: Repeated exposure may cause skin dryness or cracking.
 R67: Vapours may cause drowsiness and dizziness.

Safety Phrase(s):

S23: Do not breathe vapour.
 S24/25: Avoid contact with skin and eyes.
 S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
 S38: In case of insufficient ventilation, wear suitable respiratory equipment.

Poisons Schedule (Aust): Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL ENTITY	CAS NO.	PROPORTION
Ethyl acetate	141-78-6	>99%

Ingredients determined to be non-hazardous - Remainder

V.High >60, High 30 - 60, Med 10 - 29, Low 1 - 9, V.Low <1

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre 131 126

GENERAL INFORMATION

Avoid contact with skin and eyes. In case of accident or if you feel unwell, seek medical advice immediately. Show label or this safety data sheet to doctor in attendance.

INHALATION

Move to fresh air free from contamination. Contact physician if discomfort continues.

INGESTION

Rinse mouth thoroughly, Do not induce vomiting. Rinse mouth with water. If vomiting occurs, the head should be kept low so that stomach vomit does not enter the lungs. Never make an unconscious person vomit or drink fluids. Get medical attention immediately.

SKIN CONTACT

Remove from source of contamination. Immediately drench with water. Wash skin thoroughly with soap and water for several minutes. Contact physician if irritation persists or blistering occurs.

EYE CONTACT

Promptly wash eyes with plenty of clean water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention. Contact physician if irritation persists.

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA

Fire can be extinguished using: Alcohol resistant foam. Carbon Dioxide (CO₂). Dry Chemicals.

SPECIFIC HAZARDS

Highly explosive. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Nearby equipment must be earthed. Electrical requirements for work area should be assessed according to AS3000. Vapour may travel a considerable distance to source of ignition and flash back. Avoid all ignition sources. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc) must be eliminated both in and near the work area. Do NOT smoke.

Hazchem Code: • 3YE

PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SPECIAL FIRE FIGHTING PROCEDURES

Keep upwind to avoid fumes. Avoid water in straight hose stream; will scatter and spread fire. Cool containers exposed to flames with water until fire is out. Keep run-off water out of sewers and watercourses. Dike for water control.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet.

ENVIRONMENTAL PRECAUTIONS

Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be alerted to the Environmental Agency or other appropriate regulatory body.

SPILL CLEAN UP METHODS

Absorb with sand or other inert absorbent. Transfer to a container for disposal. Containers with collected spillage must be properly labeled with correct contents and hazard symbol.

7. HANDLING AND STORAGE

PROCEDURE FOR 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. Avoid smoking, naked lights or ignition sources. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Use good occupational work practice. Observe manufacturer's storing and handling recommendations. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.

SUITABLE CONTAINER

Sealed drum. Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY

Avoid reaction with strong acids and oxidising agents.

STORAGE REQUIREMENTS

Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storing and handling recommendations.

This material is classified as a Dangerous Good Class 3 Flammable Liquid as per the criteria of the Australian Dangerous Goods Code and must be stored in accordance with the relevant regulations. This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION



National occupational exposure limits:

No value assigned for this specific material by Safe Work Australia.

However for:

	TWA		STEL		CARCINOGEN CATEGORY	NOTICES
	ppm	mg/m ³	ppm	mg/m ³		
Ethyl acetate	200	720	400	1,400	-	-

As published by the Safe Work Australia.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

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.

WES-TWA (Workplace Exposure Standard – Time-weighted Average). The time-weighted average exposure standard designed to protect the worker for the effects of long-term exposure. WES-Ceiling (Workplace Exposure Standard - Ceiling). A concentration that should not be exceeded during any part of the working day.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals.

They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values: As per the “National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)” the ingredients in this material do not have a Biological Limit Allocated.

Engineering measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use with local exhaust ventilation or while wearing appropriate respirator. Vapour heavier than air - prevent concentration in hollows or sumps. DO NOT enter confined spaces where vapour may have collected. Keep containers closed when not in use.

Personal protection equipment: OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, RESPIRATOR.

Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS1716. Available information suggests that gloves made from neoprene or polyvinyl alcohol (PVA) should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the W/C. Wash contaminated clothing and other protective equipment before storing or re-using.

9. EXPOSURE CONTROLS/PERSONAL PROTECTION

Form / Colour / Odour:	Clear, colourless liquid with fragrant ester odour.
Solubility:	Slightly soluble in water.
Specific Gravity (20 °C):	0.9
Relative Vapour Density:	>1
Vapour Pressure (20 °C):	9.73 kPa
Flash Point (°C):	-4
Flammability Limits (%):	LEL – 2.0; UEL – 11.4
Autoignition Temp. (°C):	427
Freezing Point/Range (°C):	-83
Boiling Point/Range (°C):	77
pH:	N App
Evaporation Rate:	4.5

(Typical values only - consult specification sheet)

N Av = Not available N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability:	This material is thermally stable when stored and used as directed.
Conditions to avoid:	Elevated temperatures and sources of ignition.
Incompatible Materials:	Oxidising agents.
Hazardous decomposition products:	Oxides of carbon and nitrogen, smoke and other toxic fumes.
Hazardous reactions:	No information available.

11. TOXICOLOGICAL INFORMATION

Long Term Effects: No information available for product.

Acute toxicity / Chronic toxicity

No LD50 data available for the product.

Oral LD50 (rat): 6,100 mg/kg
Inhalation LC50 (rat): 1,600 ppm/8 hr

INGESTION

Swallowing will result in vomiting, nausea, and irritation of the gastrointestinal tract.

SKIN CONTACT

Irritating to skin. This product may cause skin sensitizing, and which may provoke an allergic reaction among sensitive individuals after repeated contact.

EYE CONTACT

Eye irritant.

HEALTH WARNINGS

This material contains epoxy resin, which may cause sensitisation and development of allergy.

ROUTE OF ENTRY:

Inhalation, Ingestion, Skin and/or eye contact.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Ecotoxicity:

Toxicity threshold (cell multiplication inhibition test)

16hr EC50 (bacteria):

650 mg/L

8d EC0 (algae):

550 mg/L

7d LC0 (green algae):

15 mg/L

72hr EC0 (protozoa):

202 mg/L

Persistence and degradability:

No information available.

Mobility:

No information available.

13. DISPOSAL INFORMATION

Refer to State or Territory Land Waste Management Authority.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail.

UN No: 1173

Dangerous Goods Class: 3

Packing Group: II

Hazchem Code: 3[Y]E

Emergency Response Guide No: 18

Proper Shipping Name: ETHYL ACETATE

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), flammable gases (Class 2.1), if both are in bulk, toxic gases (Class 2.3), spontaneously combustible substances (Class 4.2), oxidizing agents (Class 5.1), organic peroxides (Class 5.2) or radioactive substances (Class 7),

MARINE TRANSPORT

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

15. REGULATORY INFORMATION

POISONS SCHEDULE: NA

16. OTHER INFORMATION

ISSUE DATE: 13 June 2014

CONTACT POINT: TECHNICAL CONTACT 1300 45 99 39

PART B

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

PRODUCT NAME: WENCO RUBBER PRIMER ETCH – PART B
PRODUCT CODE: 7112639
RECOMMENDED USE: Halogenated Primer for rubber surfaces. Part B of two part system.

SUPPLIER: Wenco Pty Ltd
1 Ladner Street, O'connor, WA, 6163
Phone/Fax: 08 9267 5509
sales@wenco-mining.com | wenco-mining.com

Emergency Phone: 0487 936 266

2. HAZARD IDENTIFICATION

This material is hazardous according to health criteria of Safe Work Australia.

Hazard Category:

Xn Harmful
Xi Irritant

Risk Phrase(s):

R22: Harmful if swallowed.
R31: Contact with acids liberates toxic gas.
R36/37: Irritating to eyes and respiratory system.
R41: Risk of serious damage to eyes.

Safety Phrase(s):

S22: Do not breathe dust.
S24/25: Avoid contact with skin and eyes.
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
S38: In case of insufficient ventilation, wear suitable respiratory equipment.

Poisons Schedule (Aust): S6

DANGEROUS GOODS CLASSIFICATION

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous

Goods by Road & Rail".

Class: 5.1 Oxidising Agent

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL ENTITY	CAS NO.	PROPORTION
Trichloroisocyanuric acid	87-90-1	>60%
Ingredients determined to be non-hazardous -	Balance	

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126).

Inhalation: Remove from exposure. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a facemask. Seek immediate medical advice.

Skin contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek immediate medical assistance.

Eye contact: Immediately irrigate with water for 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Seek medical assistance. Transport to hospital or medical centre.

Ingestion: Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek immediate medical attention.

Notes to physician: Treat symptomatically. Delayed effects from exposure to chlorine (decomposition product) can include shortness of breath, violent headaches, pulmonary oedema and pneumonia. Can cause corneal burns.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

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

Specific hazards: Non-combustible material.

Fire fighting further advice: Heating will cause this material to undergo self-sustaining decomposition with no visible flame. On decomposing may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

Hazchem Code: 1W

Suitable extinguishing media: Not combustible, however, if material is involved in a fire use water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

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.
- Mists containing combustible materials may be explosive. Combustion products include, carbon dioxide (CO₂), nitrogen oxides (NO_x), other pyrolysis products typical of burning organic material. May emit corrosive fumes.

Personal Protective Equipment

PERSONAL PROTECTION EQUIPMENT

Breathing apparatus.

Gas tight chemical resistant suit.

Limit exposure duration to 1 BA set - 30 mins.

6. ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES

MINOR SPILLS

- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.
- Wipe up. Place in a suitable labelled container for waste disposal.

MAJOR SPILLS

- Clear area of personnel and move upwind.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water course.
- Consider evacuation (or protect in place).
- Stop leak if safe to do so.
- Contain spill with sand, earth or vermiculite.
- Collect recoverable product into labelled containers for recycling.
- Neutralise/decontaminate residue.
- Collect solid residues and seal in labelled drums for disposal.
- Wash area and prevent runoff into drains.
- After clean up, decontaminate & launder protective clothing & equipment before storing and re-using.
- If contamination of drains or waterways occurs, advise emergency services.

EMERGENCY RESPONSE PLANNING GUIDELINES (ERPG)

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

7. HANDLING AND STORAGE

Handling: Avoid skin and eye contact and inhalation of dust.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from incompatible materials described in Section 10. Store away from sources of heat or ignition. Keep containers closed when not in use - check regularly for spills.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION



National occupational exposure limits:

No value assigned for this specific material by Safe Work Australia.

However for:

	TWA ppm	mg/m3	STEL ppmmg/m3	CARCINOGEN CATEGORY	NOTICES
Chlorine	1	3	Peak Limitation	-	-

As published by the Safe Work Australia.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

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.

WES-TWA (Workplace Exposure Standard – Time-weighted Average). The time-weighted average exposure standard designed to protect the worker for the effects of long- term exposure. **WES-Ceiling** (Workplace Exposure Standard - Ceiling). A concentration that should not be exceeded during any part of the working day.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity. If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values: As per the “National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)” the ingredients in this material do not have a Biological Limit Allocated.

Engineering measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Avoid generating and inhaling dusts. Use with local exhaust ventilation or while wearing dust mask. Keep containers closed when not in use.

Personal protection equipment: OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, DUST MASK.

Wear overalls, chemical goggles and impervious gloves. Avoid generating and inhaling dusts. If dust exists, wear dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

9. EXPOSURE CONTROLS/PERSONAL PROTECTION

Form / Colour / Odour:	White crystalline powder with chlorine odour
Solubility:	Sparingly soluble in water
Specific Gravity (20 °C):	N Av
Relative Vapour Density (air=1):	N App
Vapour Pressure (20 °C):	N App
Flash Point (°C):	N App
Flammability Limits (%):	N App
Autoignition Temperature (°C):	N Av
Melting Point/Range (°C):	N App
Boiling Point/Range (°C):	N App
Decomposition Point (°C):	225-230
pH (1% aqueous solution):	3-3.5

Viscosity: N App
Total VOC (g/Litre): N App

(Typical values only - consult specification sheet)
 N Av = Not available N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: This material is thermally stable when stored and used as directed.

Conditions to avoid: Elevated temperatures.

Incompatible Materials: Oxidising agents, alkalis and water. Mixtures with combustible materials (e.g. wood, straw, cotton, paper, sugar or oils) are readily ignited and may burn intensely.

Hazardous decomposition products: Oxides of carbon and nitrogen, chlorine gas, nitrogen trichloride smoke and other toxic fumes.

Hazardous reactions: On contact with alkaline materials or with nitrogen compounds, nitrogen trichloride fumes can be formed, which are very explosive. Reacts with water and acids to form toxic chlorine gas. This product may form an explosive mixture with calcium hypochlorite.

11. TOXICOLOGICAL INFORMATION

No adverse health effects are expected if the product is handled in accordance with this MSDS and the product label. Symptoms that may arise if the product is mishandled are: Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Inhalation: Inhalation of dust will result in respiratory irritation.

Skin contact: Contact with skin will result in irritation. Burns are induced when moisture is added.

Eye contact: A severe eye irritant. Corrosive to eyes; contact can cause corneal burns. Contamination of the eyes can result in permanent injury.

Ingestion: Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain, convulsions and chemical burns.

Long Term Effects: No information available for product.

Acute toxicity / Chronic toxicity

No LD50 data available for the product.

Oral LD50(rat): 406 mg/kg.

SKIN (rabbit): Moderate irritant.

EYES (rabbit): Severe irritant.

Aqueous solutions containing 110 ppm were not irritant or sensitizing to human skin despite repeated applications. Rats were unaffected by the intake of 22 ppm trichloroisocyanuric acid plus 400 ppm isocyanuric acid in the drinking water for 30 days.

Trichloroisocyanuric acid dissociates in water producing sodium isocyanurate. For isocyanuric acid:

Toxicity studies (rat) - Diets containing up to 5% isocyanuric acid produced no adverse effects over a period of two years.

Metabolic studies (mice) - No tendency for isocyanuric acid to accumulate in tissue, organs or glands.

Carcinogenicity studies - Isocyanuric acid is not tumourigenic nor carcinogenic under the conditions expected in sanitising swimming pools.

Mutagenicity studies - Isocyanuric acid has been shown to be non-mutagenic.

Results of tests to demonstrate kidney damage appear to be equivocal. Teratogenicity tests with the aqueous sodium salt (sodium cyanurate) on rats and rabbits were negative.

12. ECOLOGICAL INFORMATION

Avoid contamination with environment for drains, sewerage, creeks and waterways. Product may be toxic to some marine and aquatic organisms.

13. DISPOSAL INFORMATION

Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail.

UN No: 2468

Dangerous Goods Class: 5.1

Packing Group: II

Hazchem Code: 1W

Emergency Response Guide No: 31

Proper Shipping Name: TRICHLOROISOCYANURIC ACID, DRY

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), flammable gases (Class 2.1), toxic gases (Class 2.3), flammable liquids (Class 3), flammable solids (Class 4.1), spontaneously combustible substances (Class 4.2), dangerous when wet substances (Class 4.3), organic peroxides (Class 5.2), radioactive substances (Class 7), corrosive substances (Class 8), fire risk substances or combustible liquids, however exemptions may apply. Also note that fire risk substances including dangerous goods of Class 6 or Class 9 which are fire risk substances are incompatible with dangerous goods of Class 1, Class 5.1 and Class 5.2.

MARINE TRANSPORT

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

UN No: 2468

Dangerous Goods Class: 5.1

Packing Group: II

Proper Shipping Name: TRICHLOROISOCYANURIC ACID, DRY

AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN No: 2468

Dangerous Goods Class: 5.1

Packing Group: II

Proper Shipping Name: TRICHLOROISOCYANURIC ACID, DRY

15. REGULATORY INFORMATION

Poisons Schedule (Aust): S6

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

ISSUE DATE: 13 JUNE 2014

CONTACT POINT: TECHNICAL CONTACT 0487 936 266

END OF DOCUMENT