

## **MATERIAL SAFETY DATA SHEET**

SDS 1100 PAGE 1 OF 8

## 1. Product and Company Identification

**1.1 PRODUCT NAME**: PROTEXX ZINCURE

**1.2 USE OF PRODUCT** A protective rust inhibiting primer for clean steel.

**1.3 SUPPLIER:** Equus Industries Ltd

**Sheffield Street** 

Riverlands Industrial Estate

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1.4 EMERGENCY CONTACT: National Poison Centre

Telephone: 0800 764 766

Information about Safety Data Sheet: Telephone: +64 3 5780214 8:00am – 6:00pm Mon – Fri

**1.5 DATE OF PREPARATION:** 5 June 2020

## 2. Hazards Identification

## 2.1 Classification:

HSNO Status: Classified as hazardous according to New Zealand Hazardous Substances (Minimum degrees of hazard) Regulations 2017

### 2.2 DG Status:

Classified as Dangerous Goods under NZS 5433:2012 Transport of Dangerous Goods on Land

## 2.3 Hazard Classification:

GHS		HSNO EQUIVALENT	HAZARD STATEMENTS	
Flammable Liquid	Cat 3	3.1C	Flammable liquid and vapour.	
STOT – SE	Cat 3	6.1E (inhalation)	May cause respiratory irritation	
Skin Corrosion/Irritation	Cat 2	6.3A	Causes skin irritation	
Serious Eye damage/irritation	Cat 2A	6.4A	Causes serious eye irritation.	
Respriratory Sensitisation	Cat 1	6.5A	May cause allergy or asthma symptoms or breathing difficulties if inhaled	
Skin Sensitisation	Cat 1	6.5B	May cause an allergic skin reaction.	
Carcinogenicity	Cat 2	6.7B	Suspected of causing genetic defects	
STOT – RE	Cat 2	6.9B (repeated exposure)	May cause damage to organs through prolonged or repeated exposure	
STOT – SE	Cat 3	6.9 (narcotic)	May cause drowsiness or dizziness	
Aquatic Toxicity (chronic)	Cat 1	9.1A	Very toxic to aquatic life with long lasting effects.	



# 2.4 GHS Pictograms:



Signal Word: Danger

## 2.5 Prevention Statements:

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face
	protection.
P285	In case of inadequate ventilation wear respiratory protection

# 2.6 Response Statement:

P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P370 + P378	In case of fire: Use sand, dry chemical, CO <sub>2</sub> or alcohol resistant foam for extinction.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before re-use.
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.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P314	Get medical advice/attention if you feel unwell.
P391	Collect spillage.
P304 + P341	IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

# 2.7 Storage Statements:

P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up

P405 Store locked up.
P403 + 233 Store in a well-ventilated place. Keep container tightly closed.



### 3. Composition/Information on Ingredients

### 3.1 Hazardous Components:

CAS NO.	COMPONENT	Concentration (% weight)
67815-87-6	Prepolymer based on aromatic polyisocyanate	<3.7
9016-87-9	Diphenylmethane - diisocyante, isomers and	2.2
	homologues	
101-68-8	Diphenylmethane -4,4 - diisocyanate	<0.3
5873-54-1	Diphenylmethane -2,4 - diisocyanate	<0.3
4083-64-1	Tosyl isocyanate	<1.2
64742-95-6	Solvent Naphtha 100	<16
7440-66-6	Zinc	75
Ingr	edients determined to be Non-hazardous	Balance

## 4. First Aid Measures

#### 4.1 After Inhalation:

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If required, artificial respiration or administration of oxygen can be performed by trained personnel. If symptoms persist, seek medical attention.

## 4.2 After Skin Contact:

Remove/take off all contaminated clothing. Wash area of contact thoroughly with plenty of soap and water. If irritation, rash or other disorders develop, seek medical attention immediately. Wash contaminated clothing before re-use.

### 4.3 After Eye Contact:

Rinse cautiously with water for at least 15 minutes while holding eye lids apart. Remove contact lenses if present and easy to do. Continue rinsing. If irritation persists, seek medical advice/attention.

#### 4.4 After Ingestion:

Immediately call Poison Centre or Doctor/Physician.

## 4.5 General:

Get immediate medical attention for any significant over exposure.

## 4.6 Advice to Doctor:

Treat symptomatically.

## 5. Fire Fighting Measures

## 5.1 Suitable Extinguishing Media:

If water fog is ineffective, use carbon dioxide, dry chemical or foam.

## 5.2 Protective Equipment:

Use accepted firefighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). Water may be used to cool containers to minimise pressure build-up.

## 5.3 Specific Hazards:

Product may ignite if heated in excess of its flashpoint. Closed container may burst when exposed to extreme heat. Empty containers may contain ignitable vapours. Vapours may travel to sources of ignition and flash back.

## 5.4 Combustion Products:

Carbon monoxide and carbon dioxide can form. Smoke, fumes. Hydrocyanic acid and nitrogen oxides as well as other hazardous vapours and gases may form.



#### 5.5 Precaution in Connection with Fire:

Product may ignite if heated in excess of its flashpoint.

Vapours may travel to source of ignition and flashback.

Closed container may burst when exposed to extreme heat.

Emptied containers may contain ignitable vapours.

#### 5.6 Additional Information:

Flashpoint = >41°C (Closed cup) Hazchem Code 3[Y]

### 6. Accidental Release Measures

## 6.1 Preliminary Action and Precautions:

- **6.1.1** Eliminate very possible source of ignition.
- **6.1.2** Evacuate all personnel immediately and ventilate area.
- **6.1.3** Avoid breathing vapour and contact with skin, eyes and clothing.
- **6.1.4** Wear recommended personal protective equipment.
- **6.1.5** Shut off leaks if possible, without risk.
- **6.1.6** Dike in the spilled product as much as possible with inert material.
- **6.1.7** Prevent entry of product into sewers, storm water drains and open bodies of water.
- **6.1.8** Clean up all spills as soon as possible, using an inert absorbed material and dispose of as hazardous waste

## 7. Handling and Storage

## 7.1 Handling:

- **7.1.1** Prevent inhalation of vapour, ingestion and contact with skin, eyes and clothing.
- 7.1.2 Keep container closed when not in use. Precautions also apply to emptied containers
- **7.1.3** Change soiled work clothing frequently.
- **7.1.4** Clean hands thoroughly after handling.
- **7.1.5** Do not smoke, weld, generate sparks, or use flame near container.
- **7.1.6** To prevent generation of static discharges, use bonding/grounding connection when pouring liquid.
- **7.1.7** Extinguish all ignition sources including pilot lights, and do not use non-explosion proof motors and electrical equipment until vapours dissipate.

## 7.2 Storage:

- **7.2.1** Store under dry cool warehouse conditions.
- **7.2.2** Store away from sources of ignition, (i.e. sparks, open flames, heat etc)
- **7.2.3** Store away from strong acids, strong bases, amines, water or moisture, and alcohols.
- **7.2.4** Keep containers tightly closed at all times.



## 8. Exposure Controls and Personal Protection Equipment

#### 8.1 Exposure Limits:

CHEMICAL NAME	CAS NUMBER	REGULATION	LIMITS	
			ppm	mg/m³
All isocyanates	-	WES/TWA	•	0.2
		WES/STEL	-	0.2
Solvent Naphtha 100	64742-95-6	ACGIH/TWN	20	100
		ACGIH/STEL	50	250

## 8.2.1 Exposure Controls in the Work Place:

Use only in well ventilated areas. Provide maximum ventilation in enclosed areas. Use local exhaust when the genera, ventilation is inadequate.

## 8.2.2 Personal Protection Equipment:

Respiratory Protection – Wear appropriate, properly fitted NIOSH/MSHA, approved respirator when

airborne contaminant level(s) are expected to exceed exposure limits indicated on the SDS. Select positive pressure supplied air respirator for

isocyanates, (TC 19c or equivalent).

Hand Protection – Use suitable impervious nitrile or neoprene gloves and protective apparel

to reduce exposure.

Eye Protection – Wear appropriate eye protection. Wear chemical safety goggles and/or

face shield to prevent eye contact. Do not wear contact lenses. Do not touch eyes with contaminated body parts or materials. Have eye washing

facilities readily available

Skin/Body Protection - Wear suitable protective clothing, e.g. long sleeved cotton overalls

Protective Measures - Use professional judgment in the selection, care, and use.

## 9. Physical and Chemical Properties

## 9.1 General Information:

Physical State/FormLiquidColourGrey

Odour Hydrocarbon
Odour threshold Not established
pH Not applicable

Melting point/Freezing point <-50°C Initial boiling point and boiling range >154°C

Flash Point >41°C (Closed cup)
Flammability (solid,gas) Not established
Upper/Lower flammability limits 0.8%vol – 7.0%vol
1.5mm Hg @ 20°C\*

Vapour Density (relate to air) >1 at 101 kPa\*

Relative Density

Water Solubility (ies)

Water solubility of ingredients

Partition coefficient: n-octanol/water

Auto-ignition temperature

2.8-2.9

Immiscible

Not applicable

Not established

>450°C\*

**Decomposition temperature** Not established

Viscosity Brookfield 50rpm 960-2000cps@23°C

\*Solvent Naphtha 100



## 10. Stability and Reaction

#### 10.1 General Information:

This material is stable when properly handled and stored.

#### 10.2 Conditions to Avoid:

High temperatures, open flames, sparks.

#### 10.3 Material to Avoid:

Strong acids, strong bases, amines, water or moisture and alcohols.

#### 10.4 Hazardous Decomposition Products:

None expected when material properly handled and stored. For thermal decomposition see Section 5.

### 10.5 Hazardous Polymerisation:

Will not occur under normal conditions.

## 11. Toxicological Information

## 11.1 Health Effects/Symptoms of Exposure:

Vapour and/or mist may irritate nose and throat. Leave area to breathe fresh air. Avoid further over exposure. If symptoms persist, seek medical attention.

### 11.2 Acute toxicity:

Solvent Naphtha CAS No. 64742-95-6

 Oral
 LD50 (Rat)
 6,800 mg/kg

 Dermal
 LC50 (Rabbit)
 3,400 mg/kg

Inhalation LD50 (Rat) 1,970 ppm/4 hours

Polymer based on Aromatic Isocyanate

CAS No. 67815-87-6 CAS No. 99784-49-3

Oral LD50 (Rat) >=5,000 mg/kg

4,4'-diiphenylmethane-diisocyanate, isomers, homologues

CAS No. 9016-87-6

Oral LD50 (Rat) 9,200 mg/kg Inhalation LC50 (Rat) 179 mg/m³

Dipenylmethane-2-4'-diisocyanate

CAS No. 5873-54-1

 Oral LD50 (Rat)
 >2,000 mg/kg

 Dermal LD50 (Rat)
 >9,400 mg/kg

 Inhalation LC50 (Rat)
 387 mg/m³

Dipenylmethane-4,4'-diisocyanate

CAS No' 101-68-8

 Oral LD50 (Rat)
 >2,000 mg/kg

 Dermal LD50 (Rat)
 >9,400 mg/kg

 Inhalation LC50 (Rat)
 368 mg/m3

## 11.3 Skin Contact:

May cause sensitisation resulting in irritation, itching and redness.

# 11.4 Eye Contact:

Vapours and/or mist may cause eye irritation.

# 11.5 Ingestion:

May cause irritation to the mouth, throat and stomach. May cause gastrointestinal irritation, nausea and vomiting.



### 11.6 Inhalation:

May cause drowsiness, weakness, and fatigue. Vapour and/or mist may irritate nose and throat. May cause moderate irritation to the respiratory system May cause allergic respiratory sensitization

#### 11.7 Chronic effects:

Unless suitable engineering controls and/or personal protective equipment is used:

- Repeated over-exposure to vapour may lead to asthma and sensitization or damage to the respiratory system.
- Repeated unprotected physical contact with the material may cause defatting of the skin leaving it vulnerable to irritation, dermatitis and/or sensitization.
- Prolonged over exposure to vapour and/or unprotected physical contact may lead to internal organ sensitization and/or damage. The Central Nervous System may also be affected.

## 12. Ecological Information

## 12.1 Environment Protection:

Prevent from entering drains, sewers and waterways. May cause long lasting harmful effects to aquatic life.

## 12.3 Persistence and degradability:

Data not available.

#### 12.4 Bioaccumulative Potential:

Data not available.

## 13. Disposal Consideration

## 13.1 Disposal Methods

Subject to hazardous waste treatment, storage and disposal requirements. Recycle or incinerate waste at approved facility or dispose of in compliance with national/regional/local, waste disposal regulations. DO NOT EMPTY INTO DRAINS, SEWERS OR WATERWAYS

## 14. Transport Information

# **14.1** Regulated under NZS 5433 for land transport.

UN Number 1263

Proper Shipping Name Paint Related

Class 3

Packing Group III

Hazchem Code 3Y

## 15. Regulatory Information

## 15.1 HSNO Approval:

Approval Code HSR 002669

HSNO Group Standard Surface Coatings and Colourants (Flammable, Toxic [6.7])



## 16. Other Information

#### 16.1 Hazard/Classifications:

3.1C	Flammable Liquid – medium hazard.
6.1E	Substances that are acutely toxic. May be harmful. Aspiration hazard.
6.3A	Substances that are irritating to the skin.
6.4A	Substances that are irritating to the eye.
6.5A	Substances that are respiratory sensitizers
6.5B	Substances that are contact sensitizers.
6.7B	Substances that are suspected human carcinogens.
6.9(narcotic)	Substances that are harmful to human target organs or systems
9.1A	Very toxic to aquatic life with long lasting effects

## 16.2 Abbreviations/Terminology:

HSNO Hazardous substances and New Organisms Act

CAS Chemical Abstract Service

ACGIH American Conference of Governmental Industrial Hygienists

LD50, LC50 Lethal dose/Lethal Concentration – Dose or concentration required to produce

the specified effect in 50% of the sample studied.

WES Workplace Exposure Standard (NZ Department of Business, Innovation and

Employment)

TWA Time weighted average exposure level designed to protect from the effects of

long-term exposure.

STEL Short-term Exposure Level (15 minutes)

### 16.3 Issue Information:

Date of Preparation: 5 June 2020

Reasons: Update

Replaces: 23 August 2019

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