

**1. Product and Company Identification**

- 1.1 PRODUCT NAME:** PROTEXX METALHIDE
- 1.2 USE OF PRODUCT** High build protective finish for structural steel surfaces.
- 1.3 SUPPLIER:** Equus Industries Ltd  
Sheffield Street  
Riverlands Industrial Estate  
Blenheim, Marlborough, New Zealand  
Telephone: +64 3 578 0214  
Fax: +64 3 578 0919  
Email: [admin@equus.co.nz](mailto:admin@equus.co.nz)
- 1.4 EMERGENCY CONTACT:** **National Poison Centre**  
**Telephone: 0800 764 766**

Information about Safety Data Sheet: Telephone: +64 3 578 0214 8:00am – 6:00pm Mon – Fri

- 1.5 DATE OF PREPARATION:** 15 November 2023

**2. Hazards Identification**

- 2.1 Statement of Hazardous Nature:**  
Classified as hazardous according to New Zealand Hazardous Substances (Minimum degrees of hazard) Regulations 2020.
- 2.2 HSNO Group Standard:**  
Surface Coatings and Colourants (Flammable)
- 2.3 GHS Classification:**

<b>Classifications GHS</b>	<b>Category</b>
Flammable Liquid	Cat 3
Acute toxicity – Inhalation	Cat 4
STOT-SE	Cat 3
Skin Corrosion – Irritation	Cat 2
Serious eye damage – Irritation	Cat 2
Respiratory Sensitisation	Cat 1
Skin Sensitisation	Cat 1
Carcinogenicity	Cat 2
STOT_RE	Cat 2
Aquatic toxicity – Chronic	Cat 3



## 2.4 Hazard Statements:

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful 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
H373	May causes damage to organs through prolonged or repeated exposure.
H413	Harmful to aquatic life with long lasting effects.

## 2.5 Prevention Statements:

P103	Read label before use.
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.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe fumes.
P264	Wash 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.
P281	Use personal protective equipment as required.
P285	In case of inadequate ventilation wear respiratory protection.

## 2.6 Response Statements:

P101	If medical advice is needed, have product container or label at hand.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P314	Get medical advice/attention if you feel unwell
P331	Do NOT induce vomiting.
P362	Take off contaminated clothing and wash before re-use.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P304 + P341	IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing
P308 + P313	IF exposed or concerned: Get medical advice/ attention
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P370 + P378	In case of fire: Use carbon dioxide, dry chemical or foam
P303 + P361+ P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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

## 2.7 Storage Statement:

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

### 3. Composition/Information on Ingredients

CAS NO.	COMPONENT	CONCENTRATION (% Weight)
67815-87-6	Polymer based on aromatic isocyanate	10 - 20
99784-49-3	Polymer based on aromatic isocyanate	10 – 20
9016-87-9	Diphenylmethane, diisocyanate isomers and homologues	<7
64742-95-6	Solvent Naphtha 100	10 – 20
14808-60-7	Silica Flour (Quartz)	< 6
5873-54-1	Diphenylmethane-2,4'-diisocyanate	< 5
101-68-8	Diphenylmethane-4,4'-diisocyanate	< 5

### 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 can form.

**5.5 Fire and Explosion Conditions:**

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.  
Containers may contain ignitable vapours.

**5.6 Additional Information:**

Flashpoint >41°C (closed cup) Hazchem Code 3[Y].

<b>6. Accidental Release Measures</b>
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**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.

<b>7. Handling and Storage</b>
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**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 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	LIMIT
All Isocyanates	-	WES – TWA	0.02mg/m <sup>3</sup>
		WES - STEL	0.07mg/m <sup>3</sup>
Solvent Naphtha 100	64742-96-6	ACGIH – TWA	20ppm 100mg/m <sup>3</sup>
		ACGIH – STEL	50ppm 250mg/m <sup>3</sup>

### 8.2.1 Exposure Controls in the Workplace:

Use only in well ventilated areas. Provide maximum ventilation in enclosed areas. Use local exhaust when the general 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** - Prevent contact with shoes and clothing.

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

## 9. Physical and Chemical Properties

### 9.1 General Information:

<b>Physical State/Form</b>	Liquid
<b>Colour</b>	Grey/Metallic
<b>Odour</b>	Hydrocarbon
<b>Odour threshold</b>	Not established
<b>pH</b>	Not applicable
<b>Melting point/Freezing point</b>	<-50°C *
<b>Initial boiling point and boiling range</b>	>154°C
<b>Flash Point</b>	>41°C (Closed cup)
<b>Flammability (solid,gas)</b>	Not established
<b>Upper/Lower flammability limits</b>	0.8%vol – 7.0%vol
<b>Vapour Pressure</b>	1.5mm Hg @ 20°C*
<b>Vapour Density (relate to air)</b>	>1 at 101 kPa*
<b>Relative Density</b>	~1.4
<b>Water Solubility (ies)</b>	Immiscible
<b>Water solubility of ingredients</b>	Not applicable
<b>Partition coefficient: n-octanol/water</b>	Not established
<b>Auto-ignition temperature</b>	>450°C*
<b>Decomposition temperature</b>	Not established
<b>Viscosity</b>	Brookfield 50rpm 540-960cps @23°C

\*Solvent Naphtha 100

### 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.

**10. 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 100	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. 99784-49-3
	CAS No. 67815-87-6
Oral LD50 (Rat)	> = 5,000 mg/kg

Diphenylmethane-diisocyanate, isomers, homologues

	CAS No. 9016-87-9
Oral LD50 (Rat)	9,200 mg/kg
Inhalation LC50 (Rat)	179 mg/m <sup>3</sup>

Diphenylmethane-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/m <sup>3</sup> /4 hrs

Diphenylmethane-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/m <sup>3</sup> /4 hrs

**11.3 Skin Contact:**

May cause sensitization 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 an 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 002662
HSNO Group Standard	Surface Coatings and Colourants (Flammable) 2020

**15.2 HSNO Controls:**

Approved Handler	Not required.
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**16. Other Information**

**16.1 Hazard/Classifications:**

Flammable Liquid	Cat 3	Carcinogenicity	Cat 2
Acute toxicity – Inhalation	Cat 4	STOT_RE	Cat 2
STOT-SE	Cat 3	Aquatic toxicity – Chronic	Cat 3
Skin Corrosion – Irritation	Cat 2		
Serious eye damage – Irritation	Cat 2		
Respiratory Sensitisation	Cat 1		
Skin Sensitisation	Cat 1		

**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)
VOC	Volatile Organic Compound

**16.3 Issue Information:**

Date of Preparation:	15 November 2023
Reasons:	Update
Replaces:	1 July 2007

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