

# Material Safety Data Sheet

## 1. IDENTIFICATION OF PREPARATION AND SUPPLIER

**Product name:** HPG-130

**Intended use:** Injection Grouting

**Supplier:** Allduro Pty Ltd  
14 Vulcan Road  
Canning Vale WA 6155  
WESTERN AUSTRALIA  
info@allduro.com

**Telephone:** +61 (08) 94551658

## 2. HAZARDS IDENTIFICATION

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

**This material is hazardous according to Safe Work Australia; HAZARDOUS SUBSTANCE.**

### Classification of the substance or mixture:

Acute Inhalation Toxicity - Category 4

Skin Irritation - Category 2

Eye Irritation - Category 2A

Respiratory Sensitisation - Category 1

Skin Sensitisation - Category 1

Carcinogenicity - Category 2

Specific target organ toxicity (single exposure) - Category 3

Specific target organ toxicity (repeated exposure) - Category 2

**SIGNAL WORD: DANGER**



**Product name: HPG-130**

**Hazard Statement(s):**

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

**Precautionary Statement(s):****Prevention:**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing 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.

P280 Wear protective gloves / protective clothing / eye protection / face protection.

P285 In case of inadequate ventilation wear respiratory protection.

**Response:**

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 CENTRE or doctor/physician.

P312 Call a POISON CENTRE or doctor/physician if you feel unwell.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P321 Specific treatment (see First Aid Measures on SafetyData Sheet).

P363 Wash contaminated clothing before re-use.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.

**Storage:**

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Poisons Schedule (SUSMP):** S6 Poison.

**Product name:** HPG-130

### 3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	CAS number	Proportion
Diphenylmethane-4,4-diisocyanate MDI	101-68-8	30-60%
Prepolymers of Diphenylmethane-4,4-diisocyanate	9016-87-9	HIGH

### 4. FIRST AID MEASURES

**Notes to physician:** Treat symptomatically. Effects may be delayed. Following exposure the patient should be kept under medical supervision for at least 48 hours.

**Ingestion:** Rinse mouth with water. Give water to drink. DO NOT induce vomiting. Seek immediate medical assistance.

**Inhalation:** Remove victim from exposure. Keep warm. Keep at rest until fully recovered. If breathing becomes laboured and patient is cyanotic (blue), ensure airways are clear and have qualified person give oxygen. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage. Seek immediate medical attention.

**Skin contact:** Wash contaminated skin with plenty of soap and water. Remove contaminated clothing and wash before re-use. If swelling, redness, blistering or irritation occurs seek medical advice.

**Eye contact:** Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Urgently seek medical assistance.

### 5. FIRE FIGHTING MEASURES

**Specific hazards:** Will emit toxic fumes on burning including those of carbon oxides, nitrogen oxides, isocyanate vapours and hydrogen cyanide. Due to reaction with water producing CO<sub>2</sub>-gas, do not re-seal contaminated containers.

**Suitable extinguishing media:** Foam, carbon dioxide and chemical powder. Water fog) of if unavailable fine water spray) may be used if no other media is available, and then only in copious quantities. The reaction between water and hot isocyanate may be vigorous.

**Required special equipment for fire fighters:** Self-contained breathing apparatus

## 6. ACCIDENTAL RELEASE MEASURES

### For minor spillage:

1. Wear skin and eye protection.
2. Treat spillage with solid media (eg sand, sawdust or chemical binder).
3. Remove and dispose of residues according to local authority regulations.

### For major spillage:

1. Clear area of all unprotected personnel
2. Wear full protective equipment including splash suit, air supplied mask, gloves, boots and eye protection.
3. Prevent run off into drains and waterways. Cover with wet soil, wet sand or solid decontaminant.
4. Let material react for 10 minutes.
5. Shovel into open top drums for further decontamination if necessary.
6. Wash down area with excess water.
7. Ventilate the area well before allowing unprotected personnel to re-enter the area.

## 7. HANDLING AND STORAGE

**Storage:** Store indoors in a dry, well-ventilated area. Recommended storage temperature 10 – 35°C.

**Materials to avoid:** Water, alcohols, amines, acids, alkalis, organic compounds containing active hydrogen groups, foodstuffs and sources of ignition.

**Unsuitable containers:** Copper, copper alloys and galvanised surfaces.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

National occupational exposure limits:

No values assigned for this specific material by the National Occupational Health and Safety Commission (Worksafe Australia).

However for the constituent;

Material	8hr TWA		15min STEL		Notices
	ppm	Mg/m <sup>3</sup>	ppm	Mg/m <sup>3</sup>	
Isocyanates, all (as –NCO)	-	0.02	-	0.07	'Sen'

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 not be exceeded at any time during a normal eight hour workday. According to current

**Product name:** HPG-130

knowledge these concentrations should neither impair the health of, nor cause undue discomfort to, nearly all workers.

'sen' notice – sensitiser. The substance can cause a specific immune response in some people. An affected individual may subsequently react to exposure to minute levels of that substance.

**Personal protection:** Avoid inhalation of fumes, use with local exhaust ventilation or while wearing an air-supplied mask. Avoid contact with skin. Wear eye protection.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, RESPIRATOR



## 9. PHYSICAL PROPERTIES

<b>Appearance and Odour:</b>	Brown liquid
<b>Specific gravity:</b>	1.12
<b>Viscosity:</b>	>400cps
<b>% Solids by weight:</b>	100
<b>pH:</b>	Not applicable
<b>Solubility in water:</b>	< 1%; miscible with water in wet state
<b>Boiling point (°C):</b>	>300
<b>Flash point (°C):</b>	>150
<b>Flammability limits (%):</b>	Not Available
<b>Autoignition Temp (°C):</b>	>600
<b>Vapour pressure (20 °C):</b>	Not Available
<b>Vapour density:</b>	Not Available
<b>Melting point (°C):</b>	5
<b>Decomposition point (°C):</b>	>300
<b>Sublimation point (°C):</b>	>300
<b>Evaporation rate:</b>	Not applicable

## 10. STABILITY AND REACTIVITY

**Materials to avoid:** Water, alcohols, amines, acids, alkalis, organic compounds containing active hydrogen groups, foodstuffs and sources of ignition.

## 11. TOXICOLOGICAL INFORMATION

**Eye contact:** Vapour and liquid can cause severe eye irritation, may cause chemical conjunctivitis.

**Skin contact:** Contact will result in moderate irritation. May cause sensitisation in some individuals. Repeated or prolonged contact may result in allergic contact dermatitis.

**Product name:** HPG-130

**Inhalation:** Vapour is an irritant to mucous membranes and respiratory tract. Inhalation of vapour can result in irritation to eyes, nose, throat and lungs, combined with dryness of the throat, tightness of the chest and difficulty breathing. A respiratory sensitiser. The onset of respiratory symptoms may be delayed for several hours after exposure.

**Ingestion:** May cause nausea, vomiting and irritation to the gastrointestinal tract.

**Long-term effects:** Available evidence indicates that repeated or prolonged exposure to the constituent MDI may result in permanent decreases in lung function and may cause aggravation to individuals with existing respiratory diseases.

**Acute toxicity / Chronic toxicity:** No LD50 data available for this product. However for the constituent MDI:

Oral LD50 (rat): >5000mg/kg.

Inhalation LC50 (rat) – 4 hour: 490 mg/m<sup>3</sup>.

Skin: Moderate irritant dermal LD50 (rabbit) - >5000mg/kg).

Eyes: irritant (human).

## 12. ECOLOGICAL INFORMATION

Immiscible with water but will react with water to produce inert and non-biodegradable solids. Material is practically non-toxic to aquatic organisms on an acute basis ( LC50 >100mg/l in most sensitive species.

## 13. DISPOSAL CONSIDERATIONS

Refer to Local authority. Empty containers must be filled with liquid decontaminant and left to stand unsealed for 24 hours. Empty the drums and recycle by through approved reconditioner. Reuse the decontaminant 5 to 10 times.

Liquid decontaminant:

Water 90 – 95%

Sodium carbonate 5 – 10%

Liquid detergent 0.2 – 0.5%

## 13. TRANSPORT INFORMATION

### Road and Rail Transport

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

### Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

### Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

**Product name: HPG-130**

## 14. REGULATORY INFORMATION

### **Classification:**

This material is hazardous according to Safe Work Australia; HAZARDOUS SUBSTANCE.

### **Classification of the substance or mixture:**

Acute Inhalation Toxicity - Category 4

Skin Irritation - Category 2

Eye Irritation - Category 2A

Respiratory Sensitisation - Category 1

Skin Sensitisation - Category 1

Carcinogenicity - Category 2

Specific target organ toxicity (single exposure) - Category 3

Specific target organ toxicity (repeated exposure) - Category 2

### **Hazard Statement(s):**

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

**Poisons Schedule (SUSMP):** S6 Poison.

## 14. OTHER INFORMATION

(1) ISSUE: 10 / 2019

(2) REASON(S) FOR ISSUE: Update to GHS requirements

This MSDS summarises at the date of issue our best knowledge of health and safety hazard information for this product, and in particular how to safely handle and use the product in the workplace. Each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

**Product name:** HPG-130