polybit WATERPROOFING SYSTEMS
3A Bellfrog Street, Greenacre NSW 2190
www.polybit.com.au

hybrid 150

One component, water based Fully Aliphatic Polyurethane Coating

MATERIAL SAFETY DATA SHEET

according to WHS and ADG requirements

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product form	:	Mixture
Product name	:	HYBRID 150
Product code	:	100-6-9-HYBRID150

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec	:	Industrial For professional use only
Use of the substance/mixture	:	One component water based polyurethane sealant

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

POLYBIT WATERPROOFING SYSTEMS
3A Bellfrog Street, Greenacre NSW 2190
Sydney, Australia
T 02 9131 6224

1.4. Emergency telephone number

T +61 414 923 809

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	:	Not Applicable
Classification (1)	:	Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A
Legend	:	1. Classification drawn from HCIS; 2. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

2.2. Label elements

Hazard pictogram(s)

Signal word	:	WARNING

2.3. Hazard statement(s)

H315	:	Causes skin irritation.
H319	:	Causes serious eye irritation.

2.3.1. Precautionary statement(s) Prevention

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

2.3.2. Precautionary statement(s) Response

P321 : Specific treatment (see advice on this label).
P362 : Take off contaminated clothing and wash before reuse.
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.
P302+P352 : IF ON SKIN: Wash with plenty of water.
P332+P313 : If skin irritation occurs: Get medical advice/attention.

2.3.3. Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

See section below for composition of Mixtures

3.2. Mixtures

CAS No	% [weight]	Name
1317-65-3	10-←20	limestone
Not Available	balance	Ingredients determined not to be hazardous
Not Available		include
9065-11-6	→60	acrylic resin
7732-18-5	10 - 20	water

SECTION 4: First aid measures

4.1. Description of first aid measures

Eye Contact : If this product comes in contact with the eyes:
- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact : If skin contact occurs:
- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

Inhalation
- If fumes, aerosols or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

Ingestion
- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
- Seek medical advice.

4.1.2. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

: Water spray or fog.
: Foam.
: Dry chemical powder.
: BCF (where regulations permit). Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire Incompatibility : Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

5.3. Advice for firefighters

Fire Fighting
: Alert Fire Brigade and tell them location and nature of hazard.
: Wear full body protective clothing with breathing apparatus.
: Prevent, by any means available, spillage from entering drains or water course.
: Use water delivered as a fine spray to control fire and cool adjacent area.
: Avoid spraying water onto liquid pools.
: DO NOT approach containers suspected to be hot.
: Cool fire exposed containers with water spray from a protected location.
: If safe to do so, remove containers from path of fire.

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)
- other pyrolysis products typical of burning organic material.
- May emit poisonous fumes.
- May emit corrosive fumes.

HAZCHEM : Not Applicable

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See section 8

6.1.1. Environmental precautions

See section 12

6.2. Methods and material for containment and cleaning up

Minor Spills
: Remove all ignition sources.
: Clean up all spills immediately.
: Avoid breathing vapours and contact with skin and eyes.
: Control personal contact with the substance, 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
Moderate hazard.
: Clear area of personnel and move upwind.
: Alert Fire Brigade and tell them location and nature of hazard.
: Wear breathing apparatus plus protective gloves.
: Prevent, by any means available, spillage from entering drains or water course.
: No smoking, naked lights or ignition sources.
: Increase ventilation.
: Stop leak if safe to do so.
: Contain spill with sand, earth or vermiculite.
: Collect recoverable product into labelled containers for recycling.
: Absorb remaining product with sand, earth or vermiculite.
: Collect solid residues and seal in labelled drums for disposal.
: Wash area and prevent runoff into drains.
: If contamination of drains or waterways occurs, advise emergency services.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Safe handling
: 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.
: DO NOT allow material to contact humans, exposed food or food utensils.
: 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. Launder contaminated clothing before re-use.
: Use good occupational work practice.
: Observe manufacturer's storage and handling recommendations contained within this SDS.
: Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

7.2. Conditions for safe storage, including any incompatibilities

Suitable container
: PP Plastic pails (15 Litres)

Storage incompatibility
: Avoid reaction with oxidising agents, bases and strong reducing agents.
: Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	limestone	Calcium carbonate	10 mg/m3	Not Available	Not Available	(a) This value is for inhalable dust containing no asbestos and ← 1% crystalline silica.

8.1.2. EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
limestone	Carbonic acid, calcium salt	45 mg/m3	210 mg/m3	1,300 mg/m3

Ingredient	Original IDLH	Revised IDLH
limestone	Not Available	Not Available
acrylic resin	Not Available	Not Available
water	Not Available	Not Available

8.2. Exposure controls

Personal protective equipment
: Avoid all unnecessary exposure.

Hand protection
: Wear protective gloves.

Eye protection
: Chemical goggles or safety glasses

Respiratory protection
: Wear appropriate mask

Other information
: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	:	Light grey viscous liquid; mixes with water.
Physical state	:	Liquid
Odour	:	Not Available
Odour threshold	:	Not Available
pH (as supplied)	:	Not Available
Melting point / freezing point (°C)	:	Not Available
Initial boiling point and boiling range (°C)	:	Not Available
Flash point (°C)	:	Not Available
Evaporation rate	:	Not Available
Flammability	:	Not Available
Upper Explosive Limit (%)	:	Not Available
Lower Explosive Limit (%)	:	Not Available
Vapour pressure (kPa)	:	Not Available
Solubility in water	:	Miscible
Vapour density (Air = 1)	:	Not Available
Relative density (Water = 1)	:	Not Available
Partition coefficient n-octanol / water	:	Not Available
Auto-ignition temperature (°C)	:	Not Available
Decomposition temperature	:	Not Available
Viscosity (cSt)	:	Not Available
Molecular weight (g/mol)	:	Not Available
Taste	:	Not Available
Explosive properties	:	Not Available
Oxidising properties	:	Not Available
Surface Tension (dyn/cm or mN/m)	:	Not Available
Volatile Component (%vol)	:	Not Available
Gas group	:	Not Available
pH as a solution (1%)	:	Not Available
VOC g/	:	Not Available

SECTION 10: Stability and reactivity

Reactivity	:	See section 7
Chemical stability	:	Unstable in the presence of incompatible materials.
	:	Product is considered stable.
	:	Hazardous polymerisation will not occur.
Possibility of hazardous reactions	:	See section 7
Conditions to avoid	:	See section 7
Incompatible materials	:	See section 7
Hazardous decomposition products	:	See section 5

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.
Ingestion	The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. High molecular weight material; on single acute exposure would be expected to pass through gastrointestinal tract with little change / absorption. Occasionally accumulation of the solid material within the alimentary tract may result in formation of a bezoar (concretion), producing discomfort.
Skin Contact	This material can cause inflammation of the skin on contact in some persons. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	This material can cause eye irritation and damage in some persons.
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.

	TOXICITY	IRRITATION
HYBRID 150	Not Available	Eye: no adverse effect observed (not irritating)[1]
limestone	Oral (rat) LD50: 6450 mg/kg[2]	Skin (rabbit): 500 mg/24h-moderate Skin: no adverse effect observed (not irritating)[1]
acrylic resin	Not Available	Not Available
water	Oral (rat) LD50: →90000 mg/kg[2]	Not Available

Legend: (1). Value obtained from Europe ECHA Registered Substances - Acute toxicity (2).* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

LIMESTONE	Eye (rabbit) 0.75: mg/24h - No evidence of carcinogenic properties. No evidence of mutagenic or teratogenic effects. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.
ACRYLIC RESIN	**CAUTION:** The chronic health effects of acrylic monomers are under review.
ACRYLIC RESIN & WATER	Use good occupational work practices to avoid personal contact. No significant acute toxicological data identified in literature search

Acute Toxicity	X	**Carcinogenicity**	X
Skin Irritation/Corrosion	✓	**Reproductivity**	X
Serious Eye Damage/Irritation	✓	**STOT - Single Exposure**	X
Respiratory or Skin sensitisation	X	**STOT - Repeated Exposure**	X
Mutagenicity	X	**Aspiration Hazard**	X

Legend: X Data either not available or does not fill the criteria for classification ✓ Data available to make classification

SECTION 12: Ecological information

12.1. Toxicity

	END POINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
HYBRID 150	Not Available	Not Available	Not Available	N/A	N/A
limestone	LC50	96	Fish	→5600mg/L	4
	EC50	72	Algae or other aquatic plants	→14mg/L	2
	EC10	72	Algae or other aquatic plants	→14mg/L	2
	NOEC	72	Algae or other aquatic plants	→14mg/L	2
acrylic resin	Not Available	Not Available	Not Available	N/A	N/A
water	LC50	96	Fish	897.520mg/L	3
	EC50	96	Algae or other aquatic plants	8768 .874mg/L	3

Legend: (1). Value obtained from Europe ECHA Registered Substances - Acute toxicity (2).* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

12.2. Persistence and degradability

INGREDIENT	PERSISTENCE : WATER/SOIL	PERSISTENCE : AIR
Water	LOW	LOW

12.3. Bioaccumulative potential

INGREDIENT	PERSISTENCE : WATER/SOIL
Water	LOW (LogKOW = -1.38)

12.4. Mobility in soil

INGREDIENT	PERSISTENCE : WATER/SOIL
Water	LOW (KOC = 14.3)

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product / Packaging disposal : Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate :

- Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Authority for disposal.
- Bury or incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14: Transport information

14.1. Labels Required

Labels Required : NO

HAZCHEM : Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
Transport in bulk according to Annex II of MARPOL and the IBC code
Not Applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

LIMESTONE IS FOUND ON THE FOLLOWING REGULATORY LISTS
Australia Inventory of Chemical Substances (AICS)
ACRYLIC RESIN IS FOUND ON THE FOLLOWING REGULATORY LISTS
Not Applicable
WATER IS FOUND ON THE FOLLOWING REGULATORY LISTS
Australia Inventory of Chemical Substances (AICS)

15.1.2. ECHA SUMMARY

Ingredient	CAS number	Index No	ECHA Dossier
limestone	1317-65-3	Not Available	01-2119486795-18-XXXX

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Not Classified	Not Classified	Not Classified
1	Not Classified	Not Classified	Not Classified
1	Not Classified	Not Classified	Not Classified
1	Not Classified	Not Classified	Not Classified

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

Ingredient	CAS number	Index No	ECHA Dossier
acrylic resin	9065-11-6	Not Available	Not Available

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Acute Tox. 4; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Acute Tox. 4	Wng	H302; H312; H315; H319; H332

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

Ingredient	CAS number	Index No	ECHA Dossier
water	7732-18-5	Not Available	Not Available

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Not Classified	Not Available	Not Available

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

15.1.3. National Inventory Status

National Inventory	Status
Australia - AICS	: No (acrylic resin)
Canada - DSL	: No (acrylic resin)
Canada - NDSL	: No (acrylic resin; water)
China - IECSC	: No (acrylic resin)
Europe - EINEC / ELINCS / NLP	: No (acrylic resin)
Japan - ENCS	: No (acrylic resin)
Korea - KECI	: No (acrylic resin)
New Zealand - NZIoC	: No (acrylic resin)
Philippines - PICCS USA - TSCA	: No (acrylic resin)
Taiwan - TCSI	: Yes
Mexico - INSQ	: Yes
Vietnam - NCI	: No (acrylic resin)
Russia - ARIPS	: No (acrylic resin)

SECTION 16: Other information

16.1. Ingredients with multiple cas numbers

Name	CAS No
acrylic resin	9065-11-6, 9900-07-6

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Polybit Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

16.2. Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average
PC-STEL: Permissible Concentration-Short Term Exposure Limit
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Governmental Industrial Hygienists
STEL: Short Term Exposure Limit
TEEL: Temporary Emergency Exposure Limit
IDLH: Immediately Dangerous to Life or Health Concentrations
OSF: Odour Safety Factor
NOAEL :No Observed Adverse Effect Level
LOAEL: Lowest Observed Adverse Effect Level
TLV: Threshold Limit Value
LOD: Limit Of Detection
OTV: Odour Threshold Value
BCF: BioConcentration Factors
BEI: Biological Exposure Index

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.