

MATERIAL SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

1.1. Product identifier

Product form : Mixture
Product name : POLYGUARD
Product code : 150-2-7

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only/Industrial
Use of the substance/mixture : One-component, aliphatic polyurethane liquid membrane.

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

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3 H226
Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2 H319
Respiratory sensitisation, Category 1 H334
Specific target organ toxicity — Repeated exposure, Category 2 H373
Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]



Hazard pictograms (CLP) :
Signal word (CLP) : Warning
Hazard statements (CLP) : H226 - Flammable liquid and vapour.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H332 - Harmful if inhaled.
H335 - May cause respiratory irritation.
H373 - May cause damage to organs through prolonged or repeated exposure.
Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P260 - Do not breathe dusts or mists.
P280 - Wear protective gloves, face protection, eye protection.

P233 - Keep container tightly closed.
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P271 - Use only outdoors or in a well-ventilated area.
 P501 - Dispose of contents/container to contents hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
 : EUH208 - Contains 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate; isophorone di-isocyanate, Dibutyltin dilaurate. May produce an allergic reaction.
 EUH204 - Contains isocyanates. May produce an allergic reaction.

EUH-statements

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Reaction mass of m-xylene, o-xylene, p-xylene and ethylbenzene	[CAS-No.] 1330-20-7 [EC-No.] 215-535-7 [EC Index-No.] 601-022-00-9 [REACH-no] 01-2119488216-32	25 – 30	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate; isophorone di-isocyanate	[CAS-No.] 4098-71-9 [EC-No.] 223-861-6 [EC Index-No.] 615-008-00-5 [REACH-no] 01 2119490408-31-0000	← 0,2	Acute Tox. 1 (Inhalation), H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Chronic 2, H411
Dibutyltin dilaurate	[CAS-No.] 77-58-7 [REACH-no] 01-2119496068-27	← 0,2	Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Specific concentration limits:

Name	Product identifier	Specific concentration limits
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate; isophorone di-isocyanate	[CAS-No.] 4098-71-9 [EC-No.] 223-861-6 [EC Index-No.] 615-008-00-5 [REACH-no] 01 2119490408-31-0000	{ 0,5 ≤ C ≤ 100} Skin Sens. 1, H317 { 0,5 ≤ C ≤ 100} Resp. Sens. 1, H334

Comments

: If REACH registration numbers do not appear, the substance is either exempt from registration or does not meet the minimum volume threshold for registration.
 Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
- First-aid measures after skin contact : Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of water/.... Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects : Causes damage to organs.
- Symptoms/effects after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled. May cause respiratory irritation.
- Symptoms/effects after skin contact : Causes skin irritation.
- Symptoms/effects after eye contact : Causes serious eye irritation.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Flammable liquid and vapour.
- Explosion hazard : May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed
Precautions for safe handling

- : Handle empty containers with care because residual vapours are flammable.
- : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Avoid breathing vapours.
- : Wash hands thoroughly after handling.

Hygiene measures

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

- : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical equipment.
- : Keep only in the original container in a cool, well ventilated place away from : Heat sources. Keep container tightly closed.

Storage conditions

Incompatible products

- : water, amines and alcohol's. Strong bases. Strong acids.

Incompatible materials

- : Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate; isophorone di-isocyanate (4098-71-9)

EU - Occupational Exposure Limits	
IOELV TWA (mg/m ³)	0,046 mg/m ³
IOELV TWA (ppm)	0,005 ppm
IOELV STEL (mg/m ³)	0,046 mg/m ³
IOELV STEL (ppm)	0,005 ppm

Reaction mass of m-xylene, o-xylene, p-xylene and ethylbenzene (1330-20-7)

EU - Occupational Exposure Limits	
IOELV TWA (mg/m ³)	221 mg/m ³
IOELV TWA (ppm)	50 ppm
IOELV STEL (mg/m ³)	442 mg/m ³
IOELV STEL (ppm)	100 ppm

8.2. Exposure controls

Personal protective equipment

- : Avoid all unnecessary exposure.

Hand protection

- : Wear protective gloves.

Eye protection

- : Chemical goggles or safety glasses

Skin and body protection

- : Wear suitable protective clothing

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

Physical state

- : Liquid

Appearance

- : Viscous liquid.

Colour

- : Grey.

Odour

- : characteristic.

Odour threshold

- : No data available

pH

- : Not applicable

Relative evaporation rate (butylacetate=1)

- : No data available

Melting point

- : No data available

Freezing point

- : No data available

Boiling point	: No data available
Flash point	: 30 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable liquid and vapour.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1,2 – 1,3 g/cm ³
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: → 20,5 mm ² /s
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available
9.2. Other information	
VOC content	: 375 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None under normal use.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

water, amines and alcohol's. Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

POLYGUARD	
ATE CLP (vapours)	14,885 mg/l/4h

3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate; isophorone di-isocyanate (4098-71-9)	
LD50 oral rat	4814 mg/kg
LD50 dermal rat	→ 7000 mg/kg
LC50 inhalation rat (Dust/Mist - mg/l/4h)	0,031 mg/l/4h

Dibutyltin dilaurate (77-58-7)	
LD50 oral rat	1600 – 2100 mg/kg
LD50 dermal rabbit	→ 2000 mg/kg

Reaction mass of m-xylene, o-xylene, p-xylene and ethylbenzene (1330-20-7)

LD50 oral rat	3523 mg/kg
LD50 dermal rabbit	12126 mg/kg
LC50 inhalation rat (Vapours - mg/l/4h)	27124 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation. pH: Not applicable
Serious eye damage/irritation	: Causes serious eye irritation. pH: Not applicable
Respiratory or skin sensitisation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met

POLYBIT

Viscosity, kinematic	→ 20,5 mm ² /s
----------------------	---------------------------

Potential adverse human health effects and symptoms	: Harmful if inhaled.
---	-----------------------

SECTION 12: Ecological information**12.1. Toxicity**

Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate; isophorone di-isocyanate (4098-71-9)

LC50 fish 1	→ 208 mg/l
EC50 72h algae (1)	→ 70 mg/l

Dibutyltin dilaurate (77-58-7)

LC50 fish 1	2 mg/l
EC50 Daphnia 1	2,28 mg/l

Reaction mass of m-xylene, o-xylene, p-xylene and ethylbenzene (1330-20-7)

LC50 fish 1	2,6 – 11,23 mg/l
EC50 Daphnia 1	→ 3,4 mg/l

12.2. Persistence and degradability**POLYGUARD**

Persistence and degradability	No available data.
-------------------------------	--------------------

12.3. Bioaccumulative potential

POLYGUARD	
Bioaccumulative potential	No available data.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations

: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Additional information

: Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials

: Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : UN 1139
UN-No. (IMDG) : UN 1139
UN-No. (IATA) : UN 1139
UN-No. (ADN) : Not regulated
UN-No. (RID) : Not regulated

14.2. UN proper shipping name

Proper Shipping Name (ADR) : COATING SOLUTION
Proper Shipping Name (IMDG) : COATING SOLUTION
Proper Shipping Name (IATA) : Coating solution
Proper Shipping Name (ADN) : Not regulated
Proper Shipping Name (RID) : Not regulated
Transport document description (ADR) : UN 1139 COATING SOLUTION
NOT SUBJECT TO THE PROVISIONS OF ADR
- The product is packed in receptacles of less than 450 litres capacity.
- Exempted according to 2.2.3.1.5 (Viscous substance exemption)), 3, III, (D/E)
Transport document description (IMDG) : UN 1139 COATING SOLUTION (NOT SUBJECT TO THE PROVISIONS OF IMDG CODE FOR THE MARKING, LABELLING AND TESTING OF PACKAGES IN CHAPTERS 4.1, 5.2, AND 6.1.
- The product is packed in receptacles not exceeding 30 L capacity
- The following statement shall be included in the transport document:
"Transport in accordance with 2.3.2.5 of the IMDG Code."
) , 3, III
Transport document description (IATA) : UN 1139 Coating solution (Not restricted per IATA-DGR special provision A3 and ICAO special provision 223), 3, III

14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3



IMDG

Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3



IATA
 Transport hazard class(es) (IATA) : 3
 Danger labels (IATA) : 3



ADN
 Transport hazard class(es) (ADN) : Not regulated
 RID
 Transport hazard class(es) (RID) : Not regulated

14.4. Packing group

Packing group (ADR) : III
 Packing group (IMDG) : III
 Packing group (IATA) : III
 Packing group (ADN) : Not regulated
 Packing group (RID) : Not regulated

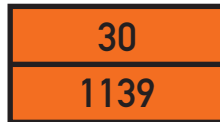
14.5. Environmental hazards

Dangerous for the environment : No
 Marine pollutant : No
 Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR) : F1
 Special provisions (ADR) : 640E
 Limited quantities (ADR) : 5L
 Excepted quantities (ADR) : E1
 Packing instructions (ADR) : P001, IBC03, LP01, R001
 Mixed packing provisions (ADR) : MP19
 Transport category (ADR) : 3
 Special provisions for carriage - Packages (ADR): V12
 Special provisions for carriage - Operation (ADR) : S2
 Hazard identification number (Kemler No.) : 30
 Orange plates :



Tunnel restriction code (ADR) : D/E
 EAC code : •3YE

Transport by sea

Special provisions (IMDG) : 955
 Limited quantities (IMDG) : 5 L
 Excepted quantities (IMDG) : E1
 Packing instructions (IMDG) : P001, LP01
 IBC packing instructions (IMDG) : IBC03
 EmS-No. (Fire) : F-E
 EmS-No. (Spillage) : S-E
 Stowage category (IMDG) : A

Air transport

PCA Excepted quantities (IATA) : E1
 PCA Limited quantities (IATA) : Y344
 PCA limited quantity max net quantity (IATA) : 10L
 PCA packing instructions (IATA) : 355
 PCA max net quantity (IATA) : 60L
 CAO packing instructions (IATA) : 366
 CAO max net quantity (IATA) : 220L
 Special provisions (IATA) : A3
 ERG code (IATA) : 3L

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. 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****15.1.1. EU-Regulations**

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Substances subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals: Dibutyltin compounds (77-58-7)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content : 375 g/l

15.1.2. National regulations**Germany**

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen – Vruchtbaarheid : Dibutyltin dilaurate is listed

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen – Ontwikkeling : Dibutyltin dilaurate, Reaction mass of m-xylene, o-xylene, p-xylene and ethylbenzene are listed

Denmark

Class for fire hazard : Class II-1

Store unit : 5 liter

Classification remarks : R10 ←H226;H315;H319;H332;H335;H373→; Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with the product

Persons suffering from asthma or eczema and persons who have chronic lung diseases, skin or respiratory allergies to isocyanates should not work with the material

The requirements from the Danish Working Environment Authorities regarding work with epoxy resins and isocyanates must be observed during use and disposal

15.2. Chemical safety assessment

No data available

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Classification according to Regulation (EC) No. 1272/2008 [CLP]:

Flam. Liq. 3	H226
Acute Tox. 4 (Inhalation:vapour)	H332
Skin Irrit. 2	H315
Eye Irrit. 2	H319

STOT SE 3 STOT RE 2	H335 H373
------------------------	--------------

Full text of H- and EUH-statements:	
Acute Tox. 1 (Inhalation)	Acute toxicity (inhal.), Category 1
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Muta. 2	Germ cell mutagenicity, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Corr. 1C	Skin corrosion/irritation, Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H360	May damage fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH204	Contains isocyanates. May produce an allergic reaction.
EUH208	Contains 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate; isophorone di-isocyanate, Dibutyltin dilaurate. May produce an allergic reaction.

SDS EU (REACH Annex II)

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.