

# **PRODUCT SAFETY DATA SHEET**

REVISION: 2.0 DATE: 08/04/20

1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

Product Name: Polycraft S30- CURING AGENT

Use:

Silicone rubber curing agent.

Supplier:

MB Fibreglass

Unit 17 & 20 Abbey Business Park Mill Road,

Newtownabbey, Co. Antrim

**BT36 7EE** 

Tel: 02890 861992 (Office Hours Only)

# 2. COMPOSITION & INFORMATION ON INGREDIENTS

## Classification of the substance or mixture

# Classification according to Regulation (EC) No 1272/2008:

Reproductive toxicity - Category 2 - H361f

For the full text of the H-Statements mentioned in this Section, see Section 16.

# Label elements Labelling according to Regulation (EC) No 1272/2008:

## Hazard pictograms



**Signal word: WARNING Hazard statements** H361f

Suspected of damaging fertility.

**Precautionary statements** 

P201 Obtain special instructions before use.

P210 Keep away from heat, hot surfaces, sparks,

open flames and other ignition sources. No

smoking.

P234 Keep only in original packaging.

P280 Wear protective gloves/ protective clothing/

eye protection/ face protection

P308 + P313 IF exposed or concerned: Get medical

advice/ attention.

P403 Store in a well-ventilated place.

# Contains

octamethylcyclotetrasiloxane

# Other hazards

May generate flammable hydrogen gas. Avoid contact with water, alcohols, acidic, basic, or oxidizing materials.

This product contains octamethylcyclotetrasiloxane (D4) that has been identified by the Member State Committee of ECHA as fulfilling the PBT and vPvB criteria laid down in Annex XIII to Regulation (EC) No 1907/2006. See section 12 for additional information. This product contains decamethylcyclopentasiloxane (D5) that has been identified by the Member State Committee of ECHA as fulfilling the vPvB criteria laid down in Annex XIII to Regulation (EC) No 1907/2006. See section 12 for additional information.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Silicone elastomer

**Mixtures** 

This product is a mixture

CASRN / EC-No. / Index-No.	REACH Registration Number	Concentration	Component	Classification: REGULATION (EC) No 1272/2008
CASRN 556-67-2 EC-No. 209-136-7 Index-No. 014-018-00-1	_	>= 4.0 - <= 5.0 %	Octamethylcyclot etrasiloxane	Flam. Liq 3 - H226 Repr 2 - H361f Aquatic Chronic - 4 - H413
CASRN 68082-23-5 EC-No. Not available Index-No. –	_	>= 2.3 - <= 3.1 %	Decamethylcyclo pentasiloxane	Not classified
Substances with	n a workplace ex	xposure limit		
CASRN 541-02-6 EC-No. 208-764-9	_	>= 2.3 - <= 3.1 %	Decamethylcyclo pentasiloxane	Not classified
Index-No				

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

# **Description of first aid measures**

#### General advice:

If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air; if effects occur, consult a physician.

**Skin contact:** Wash off with plenty of water.

**Eye contact:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

**Ingestion:** No emergency medical treatment necessary.

## **5. FIRE FIGHTING MEASURES**

Extinguishing media: Carbon dioxide, alcohol resistant foam or dry powder. Unusual firefighting hazards: Auto ignition temperature may be reduced by contact

with absorbent material.

Special firefighting procedures: Self-contained respirator should be worn.

Other recommendations: Not known.

Combustion products: Silica, carbon dioxide and traces of incompletely burned

carbon products.

## **6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures:** Remove all sources of ignition. Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.

**Environmental precautions:** Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up: Non-sparking tools should be used. Soak up with inert absorbent material. Suppress (knock down) gases/vapours/mists with a water spray jet. Clean up remaining materials from spill with suitable absorbent. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, Materials in contact with water, moisture, acids or bases have the potential to generate hydrogen gas. Recovered material should be stored in a vented container. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Recovered material should be stored in a vented container. The vent must prevent the ingress of water as further reaction with spilled materials can take place which could lead to

overpressurization of the container.

# 7. HANDLING AND STORAGE

**Precautions for safe handling:** Avoid inhalation of vapour or mist. Do not swallow. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Keep container tightly closed. Keep away from water. Protect from moisture. Keep away from heat and sources of ignition. Take precautionary measures against static discharges. Take care to prevent spills, waste and minimize release to the environment. Handle in accordance with good industrial hygiene and safety practice.

Use with local exhaust ventilation. See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Conditions for safe storage, including any incompatibilities: Keep in properly labelled containers. Store in original container. Store locked up. Keep tightly closed. Keep in a cool, well-ventilated place. Store in accordance with the particular national regulations. Keep away from heat and sources of ignition. Product may evolve minute quantities of flammable hydrogen gas which can accumulate. Adequately ventilate to maintain vapors well below flammability limits and exposure guidelines. Do not repackage. Clogged container vents may increase pressure build up. Store in a closed container.

Do not store with the following product types: Strong oxidizing agents. Explosives. Gases. Unsuitable materials for containers: Do not store in or use containers except the original product package. Do not store in or use containers except the original product package.

# **8. EXPOSURE CONTROL AND PERSONAL PROTECTION**

# **Control parameters**

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Component	Regulation	Type of listing	Value/Notation
Octamethylcyclotetrasiloxane	US WEEL	TWA	10 ppm
Decamethylcyclopentasiloxane	US WEEL	TWA	10 ppm

# **Derived No Effect Level**

octamethylcyclotetrasiloxane

## Workers

Acute systemic effects		Acute lo	cal effects	_	n systemic ects	Long-term local effects	
Dermal	Inhalation	Dermal	Inhalation	Dermal	Inhalation	Dermal	Inhalation
n.a.	73 mg/m3	n.a.	73 mg/m3	n.a.	73 mg/m3	n.a.	73 mg/m3

# **Consumers**

Acute systemic effects		Acute local effects		Long-term systemic effects			Long-term local effects		
Dermal	Inhalation	Oral	Dermal	Inhalation	Dermal	Inhalation	Oral	Dermal	Inhalation
n.a.	13 mg/m3	3.7 mg/kg bw/day	n.a.	13 mg/m3	n.a.	13 mg/m3	3.7 mg/kg bw/day	n.a.	13 mg/m3

#### Workers

Acute systemic effects		Acute loc	cal effects	Long-term systemic effects		Long-term local effects	
Dermal	Inhalation	Dermal	Inhalation	Dermal	Inhalation	Dermal	Inhalation
n.a.	97.3 mg/m3	n.a.	24.2 mg/m3	n.a.	97.3 mg/m3	n.a.	24.2 mg/m3

## **Consumers**

Acute systemic effects		Acute local effects		Long-term systemic effects			Long-term local effects		
Dermal	Inhalation	Oral	Dermal	Inhalation	Dermal	Inhalation	Oral	Dermal	Inhalation
n.a.	17.3 mg/m3	5 mg/kg bw/day	n.a.	4.3 mg/m3	n.a.	17.3 mg/m3	5 mg/kg bw/day	n.a.	4.3 mg/m3

## **Individual protection measures**

**Eye/face protection:** Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent with EN 166 or equivalent.

## Skin protection

**Hand protection:** Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Butyl rubber. Neoprene.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator. Use the following CE approved air-purifying respirator: Organic vapor cartridge, type A (boiling point >65 °C)

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Form: Liquid Colour: Colourless/Variable

Safety related information:

pH: Not determined.

Boiling point/boiling range: 150°C

Melting point/melting range: Not determined.

Flashpoint: 60°C

Flammability (solid, gas):

Explosive properties:

Oxidising properties:

Not determined.

Not determined.

Vapour pressure: <0.70kPa

Specific gravity: 1

Solubility in water: <0.10% w/w10C Solubility in fat: Not determined. Oil/water partition coefficient: Not determined.

Other data:

Vapour density(air=1): Evaporation rate (ethyl eher=1): <1

Viscosity: Not determined.

% Volatiles: <5

Molecular weight: Not determined.

## 10. STABILITY AND REACTIVITY

Reactivity: Not classified as a reactivity hazard.

Chemical stability: Stable under normal conditions.

**Possibility of hazardous reactions:** Can react with strong oxidizing agents. When heated to temperatures above 150 °C (300 °F) in the presence of air, product can form formaldehyde vapours. Safe handling conditions may be maintained by keeping vapour concentrations within the occupational exposure limit for formaldehyde. Vapours may form explosive mixture with air. Product may evolve flammable hydrogen gas on contact with water, alcohols, acidic or basic materials, many metals or metallic compounds and can form explosive mixtures in air. Hazardous decomposition products will be formed at elevated temperatures. Combustible liquid.

Conditions to avoid: Heat, flames and sparks. Exposure to moisture

Incompatible materials: Oxidizing agents

Hazardous decomposition products: Formaldehyde.

#### 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

**Acute toxicity** 

## **Acute oral toxicity**

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small

As product: Single dose oral LD50 has not been determined.

## **Acute dermal toxicity**

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product: The dermal LD50 has not been determined.

# **Acute inhalation toxicity**

No adverse effects are anticipated from single exposure to vapor. Excessive exposure may cause irritation to upper respiratory tract (nose and throat). As product: The LC50 has not been determined.

# Skin corrosion/irritation

Brief contact is essentially nonirritating to skin.

# Serious eye damage/eye irritation

May cause slight temporary eye irritation.

## Sensitization

Contains component(s) which did not cause allergic skin sensitization in guinea pigs. For respiratory sensitization:
No relevant data found.

# Carcinogenicity

Results from a 2 year repeated vapour inhalation exposure study to rats of octamethylcyclotetrasiloxane (D4) indicate effects (benign uterine adenomas) in the uterus of female animals. This finding occurred at the highest exposure dose (700 ppm) only. Studies to date have not demonstrated if these effects occur through pathways that are relevant to humans. Repeated exposure in rats to D4 resulted in protoporphyrin accumulation in the liver. Without knowledge of the specific mechanism leading to the protoporphyrin accumulation the relevance of this finding to humans is unknown. Results from a 2 year repeated vapour inhalation exposure study to rats of decamethylcyclopentasiloxane (D5) indicate effects (uterine endometrial tumors) in female animals. This finding occurred at the highest exposure dose (160 ppm) only. Studies to date have not demonstrated if this effect occurs through a pathway that is relevant to humans.

## **Aspiration Hazard**

Based on physical properties, not likely to be an aspiration hazard. No aspiration toxicity classification

# 12. ECOLOGICAL IMPACT Octamethylcyclotetrasiloxane

## Acute toxicity to fish

Not expected to be acutely toxic to aquatic organisms. No toxicity at the limit of solubility

# Acute toxicity to aquatic invertebrates

No toxicity at the limit of solubility

# Acute toxicity to algae/aquatic plants

No toxicity at the limit of solubility

# **Chronic toxicity to fish**

No toxicity at the limit of solubility

## **Methylvinyl cyclosiloxanes**

# Acute toxicity to fish

No relevant data found.

# **Decamethylcyclopentasiloxane**

# Acute toxicity to fish

No toxicity at the limit of solubility

# Acute toxicity to aquatic invertebrates

No toxicity at the limit of solubility

# Acute toxicity to algae/aquatic plants

No toxicity at the limit of solubility

# Persistence and degradability

# octamethylcyclotetrasiloxane

**Biodegradability:** Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

10-day Window: Not applicable

**Biodegradation:** 3.7 % **Exposure time:** 28 d

Method: OECD Test Guideline 310

# Stability in Water (1/2-life)

Hydrolysis, DT50, 69.3 - 144 Hour, pH 7, Half-life Temperature 24.6 °C, OECD Test

Guideline 111

## Methylvinyl cyclosiloxanes

Biodegradability: No relevant data found.

## **Decamethylcyclopentasiloxane**

**Biodegradability:** Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

10-day Window: Not applicable **Biodegradation:** 0.14 % **Exposure time:** 28 d

Method: OECD Test Guideline 310

# **Bioaccumulative potential**

#### octamethylcyclotetrasiloxane

Bioaccumulation: Bioconcentration potential is high (BCF > 3000 or Log Pow

between 5 and 7).

Partition coefficient: n-octanol/water(log Pow): 6.49 Measured

Bioconcentration factor (BCF): 12,400 Pimephales promelas (fathead minnow)

Measured

## **Methylvinyl cyclosiloxanes**

**Bioaccumulation:** Bioconcentration potential is high (BCF > 3000 or Log Pow

between 5 and 7).

Partition coefficient: n-octanol/water(log Pow): 6.7 Estimated.

**Bioconcentration factor (BCF):** 12,370 Fish Estimated.

# Decamethylcyclopentasiloxane

**Bioaccumulation:** Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

Partition coefficient: n-octanol/water(log Pow): 5.2 Measured

**Bioconcentration factor (BCF):** 2,010 Fish Estimated.

## Mobility in soil

## octamethylcyclotetrasiloxane

Expected to be relatively immobile in soil (Koc > 5000).

# Methylvinyl cyclosiloxanes

Expected to be relatively immobile in soil (Koc > 5000).

Partition coefficient (Koc): 14000 Estimated.

## Decamethylcyclopentasiloxane

Expected to be relatively immobile in soil (Koc > 5000).

**Partition coefficient (Koc):** > 5000 Estimated.

## Results of PBT and vPvB assessment

# octamethylcyclotetrasiloxane

Octamethylcyclotetrasiloxane (D4) meets the current REACh Annex XIII criteria for PBT and vPvB. In Canada, D4 has been assessed and deemed to meet the PiT criteria. However, D4 does not behave similarly to known PBT/vPvB substances. The weight of scientific evidence from field studies shows that D4 is not biomagnifying in aquatic and terrestrial food webs. D4 in air will degrade by reaction with naturally occurring hydroxyl radicals in the atmosphere. Any D4 in air that does not degrade by reaction with hydroxyl radicals is not expected to deposit from the air to water, to land, or to living organisms.

## **Methylvinyl cyclosiloxanes**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

## Decamethylcyclopentasiloxane

Decamethylcyclopentasiloxane (D5) meets the current REACh Annex XIII criteria for vPvB. However, D5 does not behave similarly to known PBT/vPvB substances. The weight of scientific evidence from field studies shows that D5 is not biomagnifying in aquatic and terrestrial food webs. D5 in air will degrade by reaction with naturally occurring hydroxyl radicals in the atmosphere. Any D5 in air that does not degrade by reaction with hydroxyl radicals is not expected to deposit from the air to water, to land, or to living organisms. Based on an independent scientific panel of experts, the Canadian Minister of the Environment has concluded that "D5 is not entering the environment in a quantity or concentration or under conditions that have or may have an immediate or long-term harmful effect on the environment or its biological diversity, or that constitute or may constitute a danger to the environment on which life depends".

## 12.6 Other adverse effects

# octamethylcyclotetrasiloxane

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

# Methylvinyl cyclosiloxanes

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

## **Decamethylcyclopentasiloxane**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

# **13. WASTE DISPOSAL**

#### **Waste Treatment Methods**

Do not dump into any sewers, on the ground, or into any body of water. This product, when being disposed of in its unused and uncontaminated state should be treated as a hazardous waste according to EC Directive 2008/98/EC. Any disposal practices must be in compliance with all national and provincial laws and any municipal or local by-laws governing hazardous waste. For used, contaminated and residual materials additional evaluations may be required. The definitive assignment of this material to the appropriate EWC group and thus it's proper EWC code will depend on the use that is made of this material. Contact the authorized waste Disposal services.

## 14. TRANSPORT INFORMATION

Classification for ROAD and Rail Transport (ADR/RID):

**UN** number Not applicable **UN** proper shipping name Not regulated for

transport

Not applicable Transport hazard class(es)

**Packing group** 

Not applicable **Environmental hazards** Not considered

environmentally hazardous based on available data.

Special precautions for user No data available.

Classification for SEA transport (IMO-IMDG):

**UN** number Not applicable

Not regulated for transport **UN proper shipping name** 

Not applicable Transport hazard class(es) Not applicable Packing group

**Environmental hazards** Not considered as marine

pollutant based on available

data.

No data available. **Special precautions for user** Transport in bulk according to Consult IMO regulations Annex I or II of MARPOL 73/78 before transporting ocean

and the IBC or IGC Code bulk

# Classification for AIR transport (IATA/ICAO):

**UN number UN proper shipping name**Not applicable
Not regulated for

transport

Transport hazard class(es)
Packing group
Not applicable
Not applicable
Not applicable
Not applicable
No data available.

#### Further information:

VENTED PACKAGES ARE FORBIDDEN FOR AIR TRANSPORT.

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

## **15. REGULATORY INFORMATION**

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

# REACh Regulation (EC) No 1907/2006

This product contains only components that have been either pre-registered, registered, are exempt from registration, are regarded as registered or are not subject to registration according to Regulation (EC) No. 1907/2006 (REACH).,The aforementioned indications of the REACH registration status are provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. It is the buyer 's/user's responsibility to ensure that his/her understanding of the regulatory status of this product is correct.

# Restrictions on the manufacture, placing on the market and use:

The following substance/s contained in this product is/are subject through Annex XVII of REACH regulation to restrictions on the manufacture, placing on the market and use when present in certain dangerous substances, mixtures and articles. Users of this product have to comply with the restrictions placed upon it by the aforementioned provision.

CAS-NO: 556-67-2 Name: octamethylcyclotetrasiloxane

Restriction status: listed in REACH Annex XVII

Restricted uses: See Commission Regulation (EU) No 2018/35 for Conditions of restriction

Number on the list: 70

CAS-NO: 541-02-6 Name: Decamethylcyclopentasiloxane

Restriction status: listed in REACH Annex XVII

Restricted uses: See Commission Regulation (EU) No 2018/35 for Conditions of restriction

Number on the list: 70

#### **Authorisation status under REACH:**

The following substance/s contained in this product might be or is/are subject to authorization in accordance with REACH:

CAS-NO: 556-67-2 Name: octamethylcyclotetrasiloxane

Authorisation status: listed in the Candidate List of Substances of Very high Concern for

Authorisation

Authorisation number: Not available

Sunset date: Not available

Exempted (Categories of): Not available

CAS-NO: 556-67-2 Name: Decamethylcyclopentasiloxane

Authorisation status: listed in the Candidate List of Substances of Very high Concern for

Authorisation

Authorization number: Not available

Sunset date: Not available

Exempted (Categories of): Not available

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Listed in Regulation: Not applicable

## **16. OTHER INFORMATION**

## Full text of H-Statements referred to under sections 2 and 3.

H226 Flammable liquid and vapour.
H361f Suspected of damaging fertility.

H413 May cause long lasting harmful effects to

aquatic life.

# Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008

Repr. - 2 - H361f - Calculation method

All information and instructions provided in this Safety Data Sheet are based on the current state scientific and technical knowledge at the date indicated on this sheet. MB Fibreglass. shall not be held responsible for any defect in the product covered by this sheet should the existence of such defect not be detectable considering the current state of scientific and technical knowledge.