



SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation of the mixture	Microseal 204
Registration number	-
Synonyms	None.
SDS number	45
Issue date	27-August-2014
Version number	01
Revision date	-
Supersedes date	-

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

Identified uses	Pre-applied thread sealant.
Uses advised against	Use in accordance with supplier's recommendations.

1.3. Details of the supplier of the safety data sheet

Manufacturer:	Hylomar Ltd.
Address:	Hylo House, Cale Lane, New Springs, Wigan, Greater Manchester, UK, WN2 1JT
Telephone number:	+44(0)1942 617000
E-mail address:	info@hylomar.co.uk
Contact person:	Technical Department
1.4. Emergency telephone number	1-760-476-3961
	Access code: 333544

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

This preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

Hazard summary

Physical hazards	Not classified for physical hazards.
Health hazards	Not classified for health hazards.
Environmental hazards	Not classified for hazards to the environment.
Specific hazards	May cause minor irritation on eye contact.
Main symptoms	Direct contact with eyes may cause temporary irritation.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms	None.
Signal word	None.
Hazard statements	The mixture does not meet the criteria for classification.

Precautionary statements

Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.

Supplemental label information Contains: 3,5,7-Triaza-1-azoniatricyclo[3.3.1.1.3,7]decane, 1-(3-chloro-2-propenyl)-,chloride. May produce an allergic reaction.

2.3. Other hazards Not a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Titanium dioxide	1-4	13463-67-7 236-675-5	-	-	
Classification:					
DSD:					-
CLP:					-
Triethanolamine	1-4	102-71-6 203-049-8	-	-	
Classification:					
DSD:					Xi;R36
CLP:					Eye Irrit. 2;H319
3,5,7-Triaza-1-azoniatricyclo[3.3.1.1 ^{3,7}]-7]decane, 1-(3-chloro-2-propenyl)-, chloride	0.1-<1	4080-31-3 223-805-0	-	-	
Classification:					
DSD:					Xn;R21/22, Xi;R38, R43, R52
CLP:					Acute Tox. 4;H302, Acute Tox. 3;H311, Skin Irrit. 2;H315, Skin Sens. 1;H317

List of abbreviations and symbols that may be used above

CLP: Regulation No. 1272/2008.

DSD: Directive 67/548/EEC.

Composition comments

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. The full text for all R- and H-phrases is displayed in section 16.

SECTION 4: First aid measures

General information

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

4.1. Description of first aid measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. If skin irritation or rash occurs: Get medical advice/attention.
Eye contact	Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists. Rinse with plenty of water.
Ingestion	Rinse mouth. Drink a few glasses of water or milk. Get medical attention if any discomfort continues.

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

Direct contact with eyes may cause temporary irritation.

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

Provide general supportive measures and treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards

The product is not flammable.

5.1. Extinguishing media

Suitable extinguishing media Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

By heating and fire, toxic vapours/gases may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

Special fire fighting procedures

Use standard firefighting procedures and consider the hazards of other involved materials. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Prevent runoff from fire control or dilution from entering streams, sewers or drinking water supply.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel Avoid inhalation of vapours and contact with skin and eyes. For personal protection, see Section 8 of the SDS.

For emergency responders Keep unnecessary personnel away. Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions Prevent further leakage or spillage if safe to do so. Do not discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up Ventilate the area. Dike the spilled material, where this is possible.

Large Spills: Stop the flow of material, if this is without risk. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use.

6.4. Reference to other sections For personal protection, see Section 8 of the SDS. For waste disposal, see Section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Avoid inhalation of vapours and contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Wash thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials.

7.3. Specific end use(s) Pre-applied thread sealant.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational exposure limits****UK. EH40 Workplace Exposure Limits (WELs)**

Components	Type	Value	Form
Titanium dioxide (CAS 13463-67-7)	TWA	4 mg/m ³	Respirable.
		10 mg/m ³	Inhalable

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no-effect level (DNEL) Not available.

Predicted no effect concentrations (PNECs) Not available.

8.2. Exposure controls

Appropriate engineering controls Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

Individual protection measures, such as personal protective equipment

General information Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection Risk of contact: Wear approved safety glasses or goggles.

Skin protection

- Hand protection Wear protective gloves. Suitable gloves can be recommended by the glove supplier. Nitrile gloves are recommended.

- Other Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection Under normal conditions, respirator is not normally required. In case of inadequate ventilation: It is recommended to use respiratory equipment with combination filter, type A2/P2.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid.
Physical state	Liquid.
Form	Liquid.
Colour	Light blue. Light green.
Odour	Almost odorless.
Odour threshold	Not applicable.
pH	9
Melting point/freezing point	Not available.
Initial boiling point and boiling range	100 °C (212 °F)
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	1.05
Relative density temperature	20 °C (68 °F)
Solubility(ies)	Completely soluble in water.
Partition coefficient (n-octanol/water)	
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	2400 cSt
Viscosity temperature	20 °C (68 °F)
Explosive properties	Not available.
Oxidizing properties	Not available.
9.2. Other information	
VOC (Weight %)	0 %

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	Carbon monoxide. Carbon dioxide. Nitrogen oxides.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation	No adverse effects due to inhalation are expected.
Skin contact	Prolonged exposure may cause skin irritation.

Eye contact	May cause eye irritation on direct contact.
Ingestion	Ingestion may cause irritation and malaise.
Symptoms	Direct contact with eyes may cause temporary irritation.

11.1. Information on toxicological effects

Acute toxicity	May cause discomfort if swallowed.
Skin corrosion/irritation	Prolonged exposure may cause skin irritation.
Serious eye damage/eye irritation	May cause eye irritation on direct contact.
Respiratory sensitisation	Not classified.
Skin sensitisation	The product contains a small amount of sensitising substance which may provoke an allergic reaction among sensitive individuals in contact with skin.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not classified.
Mixture versus substance information	Not applicable.
Other information	No other specific acute or chronic health impact noted.

SECTION 12: Ecological information

12.1. Toxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test results
3,5,7-Triaza-1-azoniatricyclo[3.3.1.1 ^{3,7}]decane, 1-(3-chloro-2-propenyl)-, chloride (CAS 4080-31-3)		
Aquatic		
Crustacea	LC50 Water flea (Ceriodaphnia dubia)	60 - 80 mg/l, 48 hours

12.2. Persistence and degradability Not available.

12.3. Bioaccumulative potential The product is not expected to bioaccumulate.

Partition coefficient n-octanol/water (log Kow)

3,5,7-Triaza-1-azoniatricyclo[3.3.1.1^{3,7}]decane, 1-(3-chloro-2-propenyl)-, chloride (CAS 4080-31-3) -0.1

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

Mobility in general The product is insoluble in water.

12.5. Results of PBT and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code	08 04 10 The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Do not discharge into drains, water courses or onto the ground. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

ADN

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not listed.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding

Not listed.

Other EU regulations

Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances

Not listed.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Not listed.

Directive 94/33/EC on the protection of young people at work

Not listed.

Other regulations

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended and respective national laws implementing EC directives.

National regulations Follow national regulation for work with chemical agents.
15.2. Chemical safety assessment No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations DSD: Directive 67/548/EEC.
CLP: Regulation No. 1272/2008.
DNEL: Derived No-Effect Level.
PNEC: Predicted No-Effect Concentration.
PBT: Persistent, bioaccumulative and toxic.
vPvB: Very Persistent and very Bioaccumulative.

References HSDB® - Hazardous Substances Data Bank
Registry of Toxic Effects of Chemical Substances (RTECS)
ESIS (European chemical Substances Information System)

Information on evaluation method leading to the classification of mixture The mixture is classified based on test data for physical hazards. The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available. For details, refer to Sections 9, 11 and 12.

Full text of any statements or R-phrases and H-statements under Sections 2 to 15

R21/22 Harmful in contact with skin and if swallowed.
R36 Irritating to eyes.
R38 Irritating to skin.
R43 May cause sensitisation by skin contact.
R52 Harmful to aquatic organisms.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

Training information Follow training instructions when handling this material.

Disclaimer The information in the sheet was written based on the best knowledge and experience currently available.