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
HYLOGRIP HY5173, Gasket 3000
Registration number
-
Synonyms
Gasket 3000
SDS number
10
Issue date
03-March-2015
Version number
02
Revision date
04-August-2016
Supersedes date
03-March-2015

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses
Flexible Gasket Compound.
Uses advised against
None known.

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
Access code: 333544

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

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

<table>
<thead>
<tr>
<th>Health hazards</th>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2</td>
<td>H315 - Causes skin irritation.</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2</td>
<td>H319 - Causes serious eye irritation.</td>
</tr>
<tr>
<td>Skin sensitisation</td>
<td>Category 1</td>
<td>H317 - May cause an allergic skin reaction.</td>
</tr>
</tbody>
</table>

Hazard summary
Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.

2.2. Label elements

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

Contains:
2-Hydroxyethyl methacrylate, 2-Hydroxypropyl methacrylate

Hazard pictograms

Signal word
Warning

Hazard statements
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.

Precautionary statements
Prevention
Avoid breathing fume/mist/vapors/spray.
Wear protective gloves and eye/face protection.
Wash thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.

Response

IF IN EYES: 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.
If skin irritation or rash occurs: Get medical advice/attention.
If ON SKIN: Wash with plenty of water.
Take off contaminated clothing and wash before reuse.

Store away from incompatible materials.

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

None.

In high concentrations, vapours may irritate throat and respiratory system and cause coughing.

3.2. Mixtures

Chemical name | % | CAS-No. / EC No. | REACH Registration No. | INDEX No. | Notes
--- | --- | --- | --- | --- | ---
2-Hydroxypropyl methacrylate | 10 - 20 | 27813-02-1 | - | - | -
| | | 248-666-3 | - | - | -
Classification: Skin Sens. 1;H317, Eye Irrit. 2;H319

2-Hydroxyethyl methacrylate | 1 - 5 | 868-77-9 | - | 607-124-00-X | D
| | | 212-782-2 | - | - | -
Classification: Skin Irrit. 2;H315, Skin Sens. 1;H317, Eye Irrit. 2;H319

Cumene hydroperoxide | 0.1 - 1 | 80-15-9 | - | 617-002-00-8 | -
| | | 201-254-7 | - | - | -
Classification: Org. Perox. E;H242, Acute Tox. 4;H302, Acute Tox. 4;H312, Skin Corr. 1B;H314, Acute Tox. 3;H331, STOT RE 2;H373, Aquatic Chronic 2;H411

List of abbreviations and symbols that may be used above

Note D: Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3 (CLP Regulation (EC) No 1272/2008, Annex VI). However, such substances are sometimes placed on the market in a non-stabilised form.

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

4.1. Description of first aid measures

Inhalation
Move into fresh air and keep at rest. If not breathing, give artificial respiration or give oxygen by trained personnel. Get medical attention if any discomfort continues.

Skin contact
Take off immediately all contaminated clothing. Wash skin thoroughly with soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Eye contact
Flush eyes thoroughly with water for at least 15 minutes. Remove any contact lenses. Get medical attention if any discomfort continues.

Ingestion
Rinse mouth thoroughly. 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

Irritation of eyes and mucous membranes. Exposed individuals may experience eye tearing, redness, and discomfort. Skin irritation. May cause an allergic skin reaction. Rash. In high concentrations, vapours may be irritating to the respiratory system.

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
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
Keep upwind. Ventilate closed spaces before entering. Avoid inhalation of vapours/spray and contact with skin and eyes. Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

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. In case of spills, beware of slippery floors and surfaces. Wipe up with absorbent material (e.g. cloth, fleece). Transfer to a container for disposal. Following product recovery, flush area with water.

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
Keep away from sources of ignition - No smoking. Use only outdoors or in a well-ventilated area. Avoid inhalation of vapours/mist and contact with skin and eyes. Avoid prolonged exposure. Persons susceptible for allergic reactions should not handle this product. 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. Avoid release to the environment.

7.2. Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, spark, open flames and other sources of ignition. Store away from incompatible materials.

7.3. Specific end use(s)
Flexible Gasket Compound.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Occupational exposure limits
No exposure limits noted for ingredient(s).

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

Recommended monitoring procedures
Follow standard monitoring procedures.

Derived no effect levels (DNELs)
Not available.

Predicted no effect concentrations (PNECs)
Not available.

Exposure guidelines
No exposure limits noted for ingredient(s).

8.2. Exposure controls
Appropriate engineering controls
Provide adequate ventilation.

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
Wear safety glasses with side shields (or goggles).

Skin protection
- Hand protection
  Wear protective gloves. Viton or nitrile rubber gloves are recommended. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.

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

Respiratory protection
  Under normal conditions, respirator is not normally required. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Thermal hazards
  Not applicable.

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Paste. Green.</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Form</td>
<td>Paste.</td>
</tr>
<tr>
<td>Colour</td>
<td>Green.</td>
</tr>
<tr>
<td>Odour</td>
<td>Slight. Pungent.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH</td>
<td>4 - 6</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flammability limit - lower (%)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flammability limit - upper (%)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>&lt; 0.5 (20 °C) (Air = 1)</td>
</tr>
<tr>
<td>Relative density</td>
<td>1 - 1.1 (20 °C) (Water = 1)</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Insoluble in water.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>110000 mPa·s (20 °C)</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not explosive.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not oxidising.</td>
</tr>
<tr>
<td>9.2. Other information</td>
<td>No relevant additional information available.</td>
</tr>
</tbody>
</table>

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
  Heat, flames and sparks.

10.5. Incompatible materials

10.6. Hazardous decomposition products
  Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.
SECTION 11: Toxicological information

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

Information on likely routes of exposure

Inhalation
In high concentrations, vapours may irritate throat and respiratory system and cause coughing.

Skin contact
Causes skin irritation. May cause an allergic skin reaction.

Eye contact
Causes serious eye irritation.

Ingestion
Ingestion may cause irritation and malaise.

Symptoms
Irritation of eyes and mucous membranes. Exposed individuals may experience eye tearing, redness, and discomfort. Skin irritation. May cause an allergic skin reaction. Rash. In high concentrations, vapours may be irritating to the respiratory system.

11.1. Information on toxicological effects

Acute toxicity
May cause discomfort if swallowed.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Hydroxyethyl methacrylate (CAS 868-77-9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rabbit</td>
<td>&gt; 3000 mg/kg</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>&gt; 4000 mg/kg</td>
</tr>
<tr>
<td>2-Hydroxypropyl methacrylate (CAS 27813-02-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>11200 mg/kg</td>
</tr>
<tr>
<td>Cumene hydroperoxide (CAS 80-15-9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rat</td>
<td>500 mg/kg</td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>220 ppm, 4 hours</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>800 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/eye irritation
Causes serious eye irritation.

Respiratory sensitisation
Due to lack of data the classification is not possible.

Skin sensitisation
May cause an allergic skin reaction.

Germ cell mutagenicity
Due to lack of data the classification is not possible.

Carcinogenicity
Due to lack of data the classification is not possible.

Reproductive toxicity
Due to lack of data the classification is not possible.

Specific target organ toxicity - single exposure
In high concentrations, vapours may irritate throat and respiratory system and cause coughing.

Specific target organ toxicity - repeated exposure
Due to lack of data the classification is not possible.

Aspiration hazard
Due to the physical form of the product it is not an aspiration hazard.

Mixture versus substance information
No data available.

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.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumene hydroperoxide (CAS 80-15-9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia</td>
</tr>
<tr>
<td>Components Test results</td>
<td>Species</td>
<td>Test results</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>12.2. Persistence and degradability</td>
<td>LC50 Fish</td>
<td>3.9 mg/l, 96 hours</td>
</tr>
<tr>
<td>12.3. Bioaccumulative potential</td>
<td>Fish</td>
<td>No data is available on the degradability of this product.</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water (log Kow)</td>
<td>No data available on bioaccumulation.</td>
<td></td>
</tr>
<tr>
<td>Bioconcentration factor (BCF)</td>
<td>Not available.</td>
<td></td>
</tr>
<tr>
<td>12.4. Mobility in soil</td>
<td>The product is insoluble in water.</td>
<td></td>
</tr>
<tr>
<td>Mobility in general</td>
<td>The product is insoluble in water and will sediment in water systems.</td>
<td></td>
</tr>
<tr>
<td>12.5. Results of PBT and vPvB assessment</td>
<td>Not a PBT or vPvB substance or mixture.</td>
<td></td>
</tr>
<tr>
<td>12.6. Other adverse effects</td>
<td>None known.</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste
Do not discharge into rivers, lakes, mountains, etc. because the product may affect the environment.

Contaminated packaging
Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code
The product is insoluble in water.

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
14.1. - 14.6.: Not regulated as dangerous goods.

RID
14.1. - 14.6.: Not regulated as dangerous goods.

ADN
14.1. - 14.6.: Not regulated as dangerous goods.

IATA
14.1. - 14.6.: Not regulated as dangerous goods.

IMDG
14.1. - 14.6.: Not regulated as dangerous goods.

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

EU regulations
Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended
Not listed.

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended
Not listed.

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 authorisation, 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, as amended.
Not listed.

Other EU regulations
Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended
Cumene hydroperoxide (CAS 80-15-9)
The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

Other regulations
The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

National regulations
Young people under 18 years old are not allowed to work with this product according to the EU Directive 94/33/EC on the protection of young people at work. Follow national regulation for work with chemical agents.

Not listed.

15.2. Chemical safety assessment
No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations
PBT: Persistent, bioaccumulative and toxic.
vPvB: Very Persistent and very Bioaccumulative.
LD50: Lethal Dose 50%.
LC50: Lethal Concentration 50%.
EC50: Effective Concentration 50%.

References
HSDB® - Hazardous Substances Data Bank

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 H-statements not written out in full under Sections 2 to 15
H242 Heating may cause a fire.
H302 Harmful if swallowed.
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.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

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.