1. Identification

Product identifier: Universal Blue/Aerograde PL32 –Light, Medium and Heavy Grades

Other means of identification:
- SDS number: 60

Recommended use: Non-Setting and Non-Hardening Gasketing Compound.

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

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
Emergency telephone:
- 1.866.519.4752 (USA, Canada, Mexico)
- 1-760-476-3962
Access code: 333544

2. Hazard(s) identification

Physical hazards: Not classified.

Health hazards:
- Acute toxicity, oral: Category 4
- Skin corrosion/irritation: Category 2
- Serious eye damage/eye irritation: Category 2A
- Carcinogenicity: Category 2
- Specific target organ toxicity, single exposure: Category 3 respiratory tract irritation
- Specific target organ toxicity, single exposure: Category 3 narcotic effects
- Specific target organ toxicity, repeated exposure: Category 2 (kidney, liver)

OSHA defined hazards: Not classified.

Label elements

Signal word: Warning

Hazard statement: Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer. May cause damage to organs (kidney, liver) through prolonged or repeated exposure.

Precautionary statement

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response: If exposed: Call a poison center/doctor. If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. 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.

Storage: Store locked up. Store in a well-ventilated place. Keep container tightly closed.
3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dichloromethane</td>
<td>75-09-2</td>
<td>25-65</td>
</tr>
</tbody>
</table>

Composition comments

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. 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. Get medical attention if irritation develops and persists.

Eye contact

Immediately rinse eyes with water. Remove any contact lenses, and continue flushing eyes with running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. Get immediate medical attention.

Ingestion

Symptoms include itching, burning, redness, and tearing of eyes. Itching, redness, burning of skin. Harmful if swallowed. Vapors may cause drowsiness and dizziness. Prolonged exposure may cause chronic effects.

Most important symptoms/effects, acute and delayed

Provide general supportive measures and treat symptomatically.

Indication of immediate medical attention and special treatment needed

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

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.

Specific hazards arising from the chemical

By heating and fire, toxic vapors/gases may be formed. Solvent vapors may form explosive mixtures with air.

Special protective equipment and precautions 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.

Fire fighting equipment/instructions

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.

General fire hazards

The product is not flammable.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep upwind. Ventilate closed spaces before entering them. Avoid inhalation of vapors/mist and contact with skin and eyes. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep out of low areas. Keep unnecessary personnel away. Wear protective clothing as described in Section 8 of this SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources. Ventilate the area. Wipe up with absorbent material (e.g. cloth, fleece). Transfer to a container for disposal. Following product recovery, flush area with water. For waste disposal, see Section 13 of the SDS.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not discharge into drains, water courses or onto the ground.
7. Handling and storage

Precautions for safe handling
Use only outdoors or in a well-ventilated area. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid prolonged exposure. Wash thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices. Avoid release to the environment. Avoid inhalation of vapors/mist and contact with skin and eyes.

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. Store locked up. Store in closed original container at temperatures between 5°C and 25°C.

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
</tr>
<tr>
<td>Dichloromethane (CAS 75-09-2)</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

| Components | Type | Value |
| Dichloromethane (CAS 75-09-2) | TWA | 50 ppm |

Biological limit values

ACGIH Biological Exposure Indices

| Components | Value | Determinant | Specimen | Sampling Time |
| Dichloromethane (CAS 75-09-2) | 0.3 mg/l | Dichloromethane | Urine | * |

* - For sampling details, please see the source document.

Exposure guidelines
Follow standard monitoring procedures.

Appropriate engineering controls
Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors. Provide easy access to water supply and eye wash facilities.

Individual protection measures, such as personal protective equipment

Eye/face protection
If eye contact is likely, safety glasses with side shields or chemical type goggles should be worn.

Skin protection
Wear protective gloves. Polyvinyl alcohol 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.

Hand protection
Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection
In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
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. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance
Blue thixotropic gel.

Physical state
Liquid.

Form
Thixotropic gel.

Color
Blue.

Odor
Sweet.

Odor threshold
Not available.
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>Not applicable.</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 applicable.</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td></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>Explosive limit - lower (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive limit - upper (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>47 kPa (20 °C)</td>
</tr>
<tr>
<td>Vapor density</td>
<td>2.93 (Air = 1) (20 °C)</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.32 (20 °C)</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td></td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>Slightly miscible.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>1.25 - 1.3 (Measured)</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>1112 °F (600 °C)</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Other information</td>
<td></td>
</tr>
<tr>
<td>Explosive limit</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not explosive.</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Not oxidizing.</td>
</tr>
<tr>
<td>VOC</td>
<td>25 - 65 % (Hylomar Test Method 1.1A Determination of Volatile Matter)</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

Reactivity  
The product is non-reactive under normal conditions of use, storage and transport.

Chemical stability  
Material is stable under normal conditions.

Possibility of hazardous reactions  
No dangerous reaction known under conditions of normal use.

Conditions to avoid  
Heat, sparks, flames, elevated temperatures.

Incompatible materials  
Strong oxidizing agents. Alkali metals.

Hazardous decomposition products  

11. Toxicological information

Information on likely routes of exposure

**Inhalation**  
Irritating to respiratory system. Vapors may cause drowsiness and dizziness.

**Skin contact**  
Causes skin irritation. May be absorbed through the skin.

**Eye contact**  
Causes serious eye irritation.

**Ingestion**  
Harmful if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics**  
Symptoms include itching, burning, redness, and tearing of eyes. Itching, redness, burning of skin. Vapors may cause drowsiness and dizziness. Harmful if swallowed. Prolonged exposure may cause chronic effects.

**Information on toxicological effects**

**Acute toxicity**  
Harmful if swallowed.
Components | Species | Test Results
--- | --- | ---
**Dichloromethane (CAS 75-09-2)**
*Acute*
*Dermal*
LD50 | Rabbit | > 2000 mg/kg, OECD test guideline 402
*Oral*
LD50 | Rat | 1600 mg/kg

**Skin corrosion/irritation**
Causes skin irritation.

**Serious eye damage/eye irritation**
Causes serious eye irritation.

**Respiratory or skin sensitization**
*Respiratory sensitization*
Based on available data, the classification criteria are not met.

*Skin sensitization*
Based on available data, the classification criteria are not met.

**Germ cell mutagenicity**
Positive in vitro, but negative in vivo assays.

**Carcinogenicity**
Suspected of causing cancer.

**IARC Monographs. Overall Evaluation of Carcinogenicity**
Dichloromethane (CAS 75-09-2) 2A Probably carcinogenic to humans.

**NTP Report on Carcinogens**
Dichloromethane (CAS 75-09-2) Reasonably Anticipated to be a Human Carcinogen.

Dichloromethane (CAS 75-09-2) Cancer

**Reproductive toxicity**
Based on available data, the classification criteria are not met.

**Specific target organ toxicity - single exposure**
May cause respiratory irritation. May cause drowsiness or dizziness.

**Specific target organ toxicity - repeated exposure**
May cause damage to organs (kidney, liver) through prolonged or repeated exposure.

**Aspiration hazard**
Due to lack of data the classification is not possible.

**Chronic effects**
Severe overexposure may cause cardiac sensitization and result in irregular rhythm. Prolonged or repeated overexposure may cause central nervous system, kidney, liver, and lung damage.

**Further information**
Symptoms may be delayed.

**12. Ecological information**
**Ecotoxicity**
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>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
</table>
**Universal Blue/Aerograde PL32 –Light, Medium and Heavy Grades (CAS Mixture)**
*Acute*
LC50 | Salmo gardneri | 5.5 mg/l, 96 hours

**Aquatic**
*Acute*
Algae EC50 | Algae | > 662 mg/l, 48 hours
Crustacea EC50 | Daphnia magna | 135 - 2270 mg/l, 48 hours
Fish LC50 | Fish | 135 - 502 mg/l, 96 hours

*Chronic*
Fish LC50 | Guppy (Poecilia reticulata) | 295 mg/l, 14 days
NOEC | Pimephales promelas | 357 mg/l, 8 days

**Persistence and degradability**
The product is not readily biodegradable. BOD: 5 - 25% / 28 days. The product is intrinsically biodegradable. Degradation = 100% / 28 days.

**Bioaccumulative potential**
Potential to bioaccumulate is low. BCF (Cyprinus carpio): 6.4 - 40, 42 days at 0.025 ppm. Log Pow: 1.25 - 1.30 (measured).

**Partition coefficient n-octanol / water (log Kow)**
Universal Blue/Aerograde PL32 –Light, Medium and Heavy Grades | 1.25 - 1.3, (Measured)
Partition coefficient n-octanol / water (log Kow)
Dichloromethane (CAS 75-09-2) 1.25

Mobility in soil
No data available.

Mobility in general
The product is slightly soluble in water.

Other adverse effects
The product contains volatile organic compounds which have a photochemical ozone creation potential.

13. Disposal considerations

Disposal instructions
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.

Hazardous waste code
The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
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.

14. Transport information

DOT
UN number UN2810
UN proper shipping name Toxic liquid, organic, n.o.s. (Dichloromethane)
Transport hazard class(es)
Class 6.1
Subsidiary risk -
Label(s) 6.1
Packing group III
Environmental hazards
Marine pollutant No
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Special provisions IB3, T7, TP1, TP28
Packaging exceptions 153
Packaging non bulk 203
Packaging bulk 241

IATA
UN number UN2810
UN proper shipping name Toxic liquid, organic, n.o.s. (Dichloromethane)
Transport hazard class(es)
Class 6.1
Subsidiary risk -
Label(s) 6.1
Packing group III
Environmental hazards No
ERG Code 6L
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG
UN number UN2810
UN proper shipping name Toxic liquid, organic, n.o.s. (Dichloromethane)
Transport hazard class(es)
Class 6.1
Subsidiary risk -
Label(s) 6.1
Packing group III
Environmental hazards
Marine pollutant No
EmS F-A, S-A
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.
15. Regulatory information

**US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

- **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**
  Not regulated.

  - Dichloromethane (CAS 75-09-2)
    - Cancer
    - Heart
    - Central nervous system
    - Liver
    - Skin irritation
    - Eye irritation

- **CERCLA Hazardous Substance List (40 CFR 302.4)**
  - Dichloromethane (CAS 75-09-2) LISTED

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

- **Hazard categories**
  - Immediate Hazard - Yes
  - Delayed Hazard - Yes
  - Fire Hazard - No
  - Pressure Hazard - No
  - Reactivity Hazard - No

- **SARA 302 Extremely hazardous substance**
  Not listed.

- **SARA 311/312 Hazardous chemical**
  Yes

- **SARA 313 (TRI reporting)**
<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dichloromethane</td>
<td>75-09-2</td>
<td>25-65</td>
</tr>
</tbody>
</table>

**Other federal regulations**

- **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**
  - Dichloromethane (CAS 75-09-2)

- **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**
  Not regulated.

- **Safe Drinking Water Act (SDWA)**
  Not regulated.

**US state regulations**

- **US. Massachusetts RTK - Substance List**
  - Dichloromethane (CAS 75-09-2)

- **US. New Jersey Worker and Community Right-to-Know Act**
  - Dichloromethane (CAS 75-09-2)

- **US. Pennsylvania Worker and Community Right-to-Know Law**
  - Dichloromethane (CAS 75-09-2)

- **US. Rhode Island RTK**
  - Dichloromethane (CAS 75-09-2)

- **US. California Proposition 65**
  - WARNING: This product contains a chemical known to the State of California to cause cancer.

  - **US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**
    - Dichloromethane (CAS 75-09-2)

**International Inventories**

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Country(s) or region</td>
<td>Inventory name</td>
<td>On inventory (yes/no)*</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

### 16. Other information, including date of preparation or last revision

- **Issue date**: 18-April-2016
- **Revision date**: 20-June-2016
- **Version #**: 02
- **HMIS® ratings**
  - Health: 2*
  - Flammability: 0
  - Physical hazard: 0

### List of abbreviations
- LD50: Lethal Dose, 50%.
- LC50: Lethal Concentration, 50%.

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

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