



SAFETY DATA SHEET

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 respiratory irritation. May cause drowsiness or dizziness. 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. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response 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 it 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. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If exposed or concerned: Get medical advice/attention.

Storage	Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Dichloromethane	75-09-2	50 - 60
Silicon dioxide, crystalline silica-free	7631-86-9	5 - 10

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. Components not listed are either non-hazardous or are below reportable limits.

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	Rinse mouth thoroughly. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Do not induce vomiting. Drink a few glasses of water or milk. Get medical attention immediately.
Most important symptoms/effects, acute and delayed	Symptoms include itching, burning, redness, and tearing of eyes. Harmful if swallowed. Vapors may cause drowsiness and dizziness. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	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.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	The product is not flammable.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Avoid inhalation of vapors/mist and contact with skin and eyes. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the 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. Put material in suitable, covered, labeled containers. Following product recovery, flush area with water.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

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

7. Handling and storage

Precautions for safe handling Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid prolonged exposure. Wear protective clothing as described in Section 8 of this safety data sheet. Wash thoroughly after handling. Wash contaminated clothing before reuse. Avoid inhalation of vapors/mist and contact with skin and eyes. Use only outdoors or in a well-ventilated area. Observe good industrial hygiene practices. Avoid release to the environment. Should be handled in closed systems, if possible.

Conditions for safe storage, including any incompatibilities Store locked up. Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, spark, open flames and other sources of ignition. Store in closed original container at temperatures between 5°C and 25°C. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Components	Type	Value
Dichloromethane (CAS 75-09-2)	STEL	125 ppm
	TWA	25 ppm

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value
Silicon dioxide, crystalline silica-free (CAS 7631-86-9)	TWA	0.8 mg/m3
		20 mppcf

US. ACGIH Threshold Limit Values

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

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Silicon dioxide, crystalline silica-free (CAS 7631-86-9)	TWA	6 mg/m3

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 Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. 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

Hand protection

Wear protective gloves. Polyvinyl alcohol gloves are recommended. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Skin protection

Other

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

Respiratory protection 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. In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Observe any medical surveillance requirements. 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.

9. Physical and chemical properties

Appearance

Physical state Liquid.
Form Thixotropic gel.
Color Blue.

Odor Sweet.

Odor threshold Not available.

pH Not applicable.

Melting point/freezing point Not available.

Initial boiling point and boiling range Not applicable.

Flash point Not applicable.

Evaporation rate Not applicable.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 47 kPa (20 °C)

Vapor density 2.93 (Air = 1) (20 °C)

Relative density 1.32 (20 °C)

Solubility(ies)

Solubility (water) Slightly miscible.

Solubility (solvents) Miscible.

Partition coefficient (n-octanol/water) 1.25 - 1.3 (Measured)

Auto-ignition temperature 1112 °F (600 °C)

Decomposition temperature Not available.

Viscosity Not applicable.

Other information

Explosive limit Not available.

Explosive properties Not explosive.

Oxidizing properties Not oxidizing.

VOC 25 - 65 % (Hylomar Test Method 1.1A Determination of Volatile Matter)

10. Stability and reactivity

Reactivity The product is stable and non reactive under normal conditions of 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	Phosgene. Hydrogen chloride. Carbon monoxide. Carbon dioxide.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause respiratory irritation. 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. 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
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Dichloromethane (CAS 75-09-2)

Acute

Dermal

LD50 Rabbit > 2000 mg/kg OECD test guideline 402

Oral

LD50 Rat 1600 mg/kg

Silicon dioxide, crystalline silica-free (CAS 7631-86-9)

Acute

Dermal

LD50 Rabbit > 5000 mg/kg, 24 Hours

Inhalation

Dust

LC50 Rat > 0.14 mg/l, 4 Hours

Oral

LD50 Rat > 3300 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.

Silicon dioxide, crystalline silica-free (CAS 7631-86-9) 3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Dichloromethane (CAS 75-09-2) Reasonably Anticipated to be a Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

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. May cause damage to organs through prolonged or repeated exposure. 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.

Product	Species	Test Results	
Universal Blue/Aerograde PL32 –Light, Medium and Heavy Grades (CAS Mixture)			
<i>Acute</i>			
	LC50	Salmo garidneri	5.5 mg/l, 96 hours
Aquatic			
<i>Acute</i>			
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
<i>Chronic</i>			
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.

Partition coefficient n-octanol / water (log Kow)

Universal Blue/Aerograde PL32 –Light, Medium and Heavy Grades	1.25 - 1.3, (Measured)
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 Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not discharge into drains, water courses or onto the ground. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company. 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. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

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.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Dichloromethane (CAS 75-09-2) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

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

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation
Carcinogenicity
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Dichloromethane	75-09-2	50 - 60

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)

Silicon dioxide, crystalline silica-free (CAS 7631-86-9)

US. New Jersey Worker and Community Right-to-Know Act

Dichloromethane (CAS 75-09-2)

Silicon dioxide, crystalline silica-free (CAS 7631-86-9)

US. Pennsylvania Worker and Community Right-to-Know Law

Dichloromethane (CAS 75-09-2)

Silicon dioxide, crystalline silica-free (CAS 7631-86-9)

US. Rhode Island RTK

Dichloromethane (CAS 75-09-2)

California Proposition 65**WARNING:** This product can expose you to chemicals including Dichloromethane, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Dichloromethane (CAS 75-09-2)

Listed: April 1, 1988

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Dichloromethane (CAS 75-09-2)

International Inventories

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

*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	15-January-2018
Version #	03

HMIS® ratings

Health: 2*
Flammability: 0
Physical hazard: 0

NFPA ratings**List of abbreviations**

LD50: Lethal Dose, 50%.
LC50: Lethal Concentration, 50%.
EC50: Effective Concentration, 50%.
NOEC: No observed effect concentration.

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.

This SDS contains revisions in the following section(s):

2, 3, 6, 7, 8, 9, 11, 13, 15, 16