



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:	Hylomar 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.

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	25-65

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	Rinse mouth thoroughly. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content does not get into the lungs. 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. Itching, redness, burning of skin. 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.
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

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

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

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

Hand 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.

Skin protection

Other

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. 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 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

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.

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.
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 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	Phosgene. Hydrogen chloride. Carbon monoxide. Carbon dioxide.

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		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg, OECE test guideline 402
<i>Oral</i>		
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.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
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.		
	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	> 662 mg/l, 48 hours
	Crustacea	EC50	135 - 2270 mg/l, 48 hours
	Fish	LC50	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. 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.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

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
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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
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SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Dichloromethane	75-09-2	25-65

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.
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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

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

Country(s) or region	Inventory name	On inventory (yes/no)*
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
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	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.