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	Universal Blue/Aerograde PL32 –Light, Medium and Heavy Grades
Registration number	-
Synonyms	None.
SDS number	60
Issue date	18-April-2016
Version number	03
Revision date	04-February-2019
Supersedes date	20-June-2016

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

Identified uses	Non-Setting and Non-Hardening Gasketing 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	+1-760-476-3961 (US) 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

Health hazards

Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 2	H319 - Causes serious eye irritation.
Carcinogenicity	Category 2	H351 - Suspected of causing cancer.
Specific target organ toxicity - single exposure	Category 3 narcotic effects	H336 - May cause drowsiness or dizziness.

Hazard summary Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer. May cause drowsiness or dizziness.

2.2. Label elements

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

Contains: Dichloromethane

Hazard pictograms

Signal word Warning

Hazard statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

H351	Suspected of causing cancer.

Precautionary statements

Prevention

P201	Obtain special instructions before use.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

P308 + P313	IF exposed or concerned: Get medical advice/attention.

Storage

P405	Store locked up.

Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information None.

2.3. Other hazards This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Dichloromethane	50 - 60	75-09-2 200-838-9	-	602-004-00-3	#
Classification:	Skin Irrit. 2;H315, Eye Irrit. 2;H319, STOT SE 3;H336, Carc. 2;H351				

List of abbreviations and symbols that may be used above

#: This substance has been assigned Community workplace exposure limit(s).

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 H-statements is displayed in section 16.

SECTION 4: First aid measures

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

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. 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 doesn't get into the lungs. Do not induce vomiting. Drink a few glasses of water or milk. Get medical attention immediately.

4.2. Most important symptoms and effects, both acute and delayed Symptoms include itching, burning, redness, and tearing of eyes. Vapours may cause drowsiness and dizziness.

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. Solvent vapours may form explosive mixtures with air.

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.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Ventilate closed spaces before entering them. Avoid inhalation of vapours/mist and contact with skin and eyes. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
For emergency responders	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
6.2. Environmental precautions	Do not discharge into drains, water courses or onto the ground. Prevent further leakage or spillage if safe to do so.
6.3. Methods and material 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.
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	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 vapours/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.
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 in closed original container at temperatures between 5°C and 25°C. Store away from incompatible materials (see section 10 of the SDS).
7.3. Specific end use(s)	Non-Setting and Non-Hardening Gasketing Compound.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
Dichloromethane (CAS 75-09-2)	STEL	1060 mg/m3
		300 ppm
	TWA	350 mg/m3
		100 ppm

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU

Components	Type	Value
Dichloromethane (CAS 75-09-2)	STEL	706 mg/m3
		200 ppm
	TWA	353 mg/m3
		100 ppm

Biological limit values

UK. EH40 Biological Monitoring Guidance Values (BMGVs)

Components	Value	Determinant	Specimen	Sampling Time
Dichloromethane (CAS 75-09-2)	30 ppm	Carbon monoxide	end-tidal breath	*

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

Recommended monitoring procedures	Follow standard monitoring procedures.
Derived no effect levels (DNELs)	Not available.

Predicted no effect concentrations (PNECs)	Not available.

Exposure guidelines

UK EH40 WEL: Skin designation

Dichloromethane (CAS 75-09-2)	Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering controls	Good general ventilation 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

General information	Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/face protection	If eye contact is likely, safety glasses with side shields or chemical type goggles should be worn. Eye protection should meet standard EN 166.
Skin protection	
- Hand protection	Polyvinyl alcohol gloves are recommended. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Wear suitable gloves tested to EN374.
- Other	Normal work clothing (long sleeved shirts and long pants) is recommended.
Respiratory protection	In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with gas filter (type A2). 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	Wear appropriate thermal protective clothing, when necessary.
Hygiene measures	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.
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

Physical state	Liquid.
Form	Thixotropic gel.
Colour	Blue.
Odour	Sweet.
Odour 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.
Vapour pressure	47 kPa (20 °C)
Vapour density	2.93 (Air = 1) (20 °C)
Relative density	1.32 (20 °C)
Solubility(ies)	Slightly miscible.
Partition coefficient (n-octanol/water)	1.25 - 1.3 (Measured)
Auto-ignition temperature	600 °C (1112 °F)
Decomposition temperature	Not available.

Viscosity	Not applicable.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2. Other information

Explosive limit	Not available.
VOC	25 - 65 % (Hylomar Test Method 1.1A Determination of Volatile Matter)

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, sparks, flames, elevated temperatures.
10.5. Incompatible materials	Strong oxidising agents. Alkali metals.
10.6. Hazardous decomposition products	Phosgene. Hydrogen chloride. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Inhalation	May cause respiratory irritation. Vapours may cause drowsiness and dizziness.
Skin contact	Causes skin irritation. May be absorbed through the skin.
Eye contact	Causes serious eye irritation.
Ingestion	Ingestion may cause irritation and malaise.
Symptoms	Symptoms include itching, burning, redness, and tearing of eyes. Vapours may cause drowsiness and dizziness.

11.1. Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Dichloromethane (CAS 75-09-2)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg OECD Test Guideline 402
Oral		
LD50	Rat	> 2000 mg/kg

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory sensitisation	Based on available data, the classification criteria are not met.
Skin sensitisation	Due to partial or complete lack of data the classification is not possible.
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.

Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - single exposure	May cause respiratory irritation. May cause drowsiness or dizziness.
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
Mixture versus substance information	The product is a mixture.
Other information	Severe overexposure may cause cardiac sensitisation and result in irregular rhythm. Symptoms may be delayed.

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.

Product		Species	Test Results
Universal Blue/Aerograde PL32 –Light, Medium and Heavy Grades (CAS Mixture)			
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
		Salmo gairdneri (new name Oncorhynchus mykiss)	5.5 mg/l, 96 hours
Chronic			
Fish	LC50	Guppy (Poecilia reticulata)	295 mg/l, 14 days
	NOEC	Pimephales promelas	357 mg/l, 8 days

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

12.3. 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

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

Mobility in general The product is slightly soluble in water.

12.5. Results of PBT and vPvB assessment This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

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

Substance Global Warming Potential per (Annex IV), Regulation 517/2014/EU on fluorinated greenhouse gases, as amended

Dichloromethane (CAS 75-09-2)	9

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. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

EU waste code 16 03 05*
The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information 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.

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number UN2810

14.2. UN proper shipping name TOXIC LIQUID, ORGANIC, N.O.S. (Dichloromethane)

14.3. Transport hazard class(es)

Class 6.1(PGIII)

Subsidiary risk -

Label(s) 6.1

Hazard No. (ADR) 60

Tunnel restriction code E

14.4. Packing group III
14.5. Environmental hazards No.
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

RID

14.1. UN number UN2810
14.2. UN proper shipping name TOXIC LIQUID, ORGANIC, N.O.S. (Dichloromethane)
14.3. Transport hazard class(es)
Class 6.1(PGIII)
Subsidiary risk -
Label(s) 6.1
14.4. Packing group III
14.5. Environmental hazards No.
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

ADN

14.1. UN number UN2810
14.2. UN proper shipping name TOXIC LIQUID, ORGANIC, N.O.S. (Dichloromethane)
14.3. Transport hazard class(es)
Class 6.1(PGIII)
Subsidiary risk -
Label(s) 6.1
14.4. Packing group III
14.5. Environmental hazards No.
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

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

IMDG

14.1. UN number UN2810
14.2. UN proper shipping name TOXIC LIQUID, ORGANIC, N.O.S. (Dichloromethane)
14.3. Transport hazard class(es)
Class 6.1(PGIII)
Subsidiary risk -
14.4. Packing group III
14.5. Environmental hazards
Marine pollutant No.
EmS F-A, S-A
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

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 and II, as amended

Not listed.

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

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.

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

Dichloromethane (CAS 75-09-2)

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

Dichloromethane (CAS 75-09-2)

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

Not listed.

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 EU Directive 94/33/EC on the protection of young people at work, as amended. According to Directive 92/85/EEC as amended, pregnant women should not work with the product, if there is the least risk of exposure. 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

DNEL: Derived No-Effect Level.
PNEC: Predicted No-Effect Concentration.
PBT: Persistent, bioaccumulative and toxic.
vPvB: Very Persistent and very Bioaccumulative.
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)
Information on evaluation method leading to the classification of mixture	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
Full text of any H-statements not written out in full under Sections 2 to 15	H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H351 Suspected of causing cancer.
This SDS contains revisions in the following section(s):	This safety data sheet contains revisions in the following section(s): 2, 3, 4, 11, 12, 16
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.