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 - Light, Medium & Heavy Grades
Registration number	-
Synonyms	None.
SDS number	2
Issue date	22-August-2011
Version number	03
Revision date	23-July-2013
Supersedes date	06-March-2013

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 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 Directive 67/548/EEC or 1999/45/EC as amended

Classification	Carc. Cat. 3;R40, Xn;R22-48/20, Xi;R36/38

The full text for all R-phrases is displayed in section 16.

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

Health hazards

Acute toxicity, oral	Category 4	H302 - Harmful if swallowed.
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 - repeated exposure	Category 2 (Central nervous system)	H373 - May cause damage to organs (Central nervous system) through prolonged or repeated exposure.

Hazard summary

Physical hazards	Not classified for physical hazards.
Health hazards	Harmful if swallowed. Irritating to eyes and skin. Limited evidence of a carcinogenic effect. Harmful: danger of serious damage to health by prolonged exposure through inhalation.
Environmental hazards	Not classified for hazards to the environment.
Specific hazards	Prolonged exposure may cause chronic effects.
Main symptoms	Symptoms include itching, burning, redness, and tearing of eyes. Itching, redness, burning of skin. Vapours may cause drowsiness and dizziness.

2.2. Label elements

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

Contains: Dichlormethane

Hazard pictograms

Signal word Danger

Hazard statements

H302 - Harmful if swallowed.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H351 - Suspected of causing cancer.
H373 - May cause damage to organs (Central nervous system) through prolonged or repeated exposure.

Precautionary statements

Prevention

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe mist or vapour.
P264 - Wash thoroughly after handling.
P280 - Wear protective gloves/eye protection/face protection.

Response

P301 + P312 - IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.
P330 - Rinse mouth.
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P332 + P313 - If skin irritation occurs: Get medical advice/attention.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.

Storage P405 - Store locked up.

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

Supplemental label information Not applicable.

2.3. Other hazards Not assigned.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Dichlormethane	25-65	75-09-2 200-838-9	-	602-004-00-3	

Classification: **DSD:** Carc. Cat. 3;R40, Xn;R22-48/20, Xi;R36/38

CLP: Acute Tox. 4;H302, Skin Irrit. 2;H315, Eye Irrit. 2;H319, Carc. 2;H351, STOT RE 2;H373

#: This substance has workplace exposure limit(s).
CLP: Regulation No. 1272/2008.
DSD: Directive 67/548/EEC.

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

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. If irritation develops and persists, get medical attention.

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 doesn't get into the lungs. 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. Itching, redness, burning of skin. 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.

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 them. Avoid inhalation of vapours/spray 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. 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 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.

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/spray and contact with skin and eyes. 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.

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

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
Dichlormethane (CAS 75-09-2)	STEL	1060 mg/m3
		300 ppm
	TWA	350 mg/m3
		100 ppm

Biological limit values

UK. EH40 Biological Monitoring Guidance Values (BMGVs)

Components	Value	Determinant	Specimen	Sampling time
Dichlormethane (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 level (DNEL) Not available.

Predicted no effect concentrations (PNECs) Not available.

Exposure guidelines

UK EH40 WEL: Skin designation

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

8.2. Exposure controls

Appropriate engineering controls Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

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 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.

- 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 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

Appearance Blue thixotropic gel.

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)	Log Pow: 1.25 - 1.30 (measured)
Auto-ignition temperature	600 °C (1112 °F)
Decomposition temperature	Not available.
Viscosity	Not applicable.
Explosive properties	Not available.
Oxidizing properties	Not available.

9.2. Other information

Explosive limit	Not available.
VOC (Weight %)	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

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

11.1. Information on toxicological effects

Acute toxicity Harmful if swallowed.

Product	Species	Test results
Universal Blue - Light, Medium & Heavy Grades (CAS Mixture)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg
Inhalation		
LC50	Rat	15000 ppm
Oral		
LD50	Rat	1410 - 2524 mg/kg

Components	Species	Test results
Dichlormethane (CAS 75-09-2)		
Acute		
Inhalation		
LC50	Guinea pig	40.2 mg/l, 6 Hours
	Mouse	56.23 mg/l, 7 Hours
		51.5 mg/l, 2 Hours
		49.1 mg/l, 6 Hours
	Rat	2000 mg/l, 15 Minutes

Components	Species	Test results
		88 mg/l, 900 Days
		79 mg/l, 2 Hours
		52 mg/l, 6 Hours
LD50	Mouse	16000 mg/l, 7 Hours
Oral		
LD50	Rat	1600 mg/kg
Other		
LD50	Mouse	437 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory sensitisation Not classified.

Skin sensitisation Not classified.

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

Carcinogenicity Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Dichlormethane (CAS 75-09-2) 2B Possibly carcinogenic to humans.

Reproductive toxicity Not classified.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure May cause damage to organs through prolonged or repeated exposure: Central nervous system. Liver. Kidneys.

Aspiration hazard Not classified.

Mixture versus substance information Not available.

Other information Symptoms may be delayed. Severe overexposure may cause cardiac sensitisation and result in irregular rhythm.

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 - Light, Medium & Heavy Grades (CAS Mixture)			
	LC50	Salmo garidneri	5.5 mg/l, 96 hours
Aquatic			
Algae	EC50	Algae	> 662 mg/l, 48 hours
Crustacea	EC50	Daphnia magna	135 - 2270 mg/l, 48 hours
Fish	LC50	Guppy (Poecilia reticulata)	295 mg/l, 14 days
	NOEC	Pimephales promelas	357 mg/l, 8 days

Components		Species	Test results
Dichlormethane (CAS 75-09-2)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1250 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	140.8 - 277.8 mg/l, 96 hours

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. Log Pow: 1.25 - 1.30 (measured).

Partition coefficient n-octanol/water (log Kow) Log Pow: 1.25 - 1.30 (measured)

Dichlormethane (CAS 75-09-2) 1.25

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil Not available.

Mobility in general The product is slightly soluble in water.

12.5. Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture.
12.6. Other adverse effects	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. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

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 Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
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.
Special precautions	Dispose of in accordance with local regulations.

SECTION 14: Transport information

ADR

14.1. UN number	UN2810
14.2. UN proper shipping name	Toxic liquid, organic, n.o.s. (Dichlormethane)
14.3. Transport hazard class(es)	6.1
Subsidiary class(es)	-
14.4. Packing group	III
14.5. Environmental hazards	No
Tunnel restriction code	E
Labels required	6.1
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. (Dichlormethane)
14.3. Transport hazard class(es)	6.1
Subsidiary class(es)	-
14.4. Packing group	III
14.5. Environmental hazards	No
Labels required	6.1
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. (Dichlormethane)
14.3. Transport hazard class(es)	6.1
Subsidiary class(es)	-
14.4. Packing group	III
14.5. Environmental hazards	No
Labels required	6.1
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. (Dichlormethane)
14.3. Transport hazard class(es)	6.1
Subsidiary class(es)	-
14.4. Packing group	III

14.5. Environmental hazards	No
Labels required	6.1
ERG code	6L
14.6. Special precautions for user	Read safety instructions, MSDS and emergency procedures before handling.

IMDG

14.1. UN number	UN2810
14.2. UN proper shipping name	Toxic liquid, organic, n.o.s. (Dichlormethane)
14.3. Transport hazard class(es)	6.1
Subsidiary class(es)	-
14.4. Packing group	III
14.5. Environmental hazards	
Marine pollutant	No
Labels required	6.1
EmS	F-A, S-A
14.6. Special precautions for user	Read safety instructions, MSDS 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

Not listed.

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II

Not listed.

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

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended

Not listed.

Regulation (EC) No. 689/2008 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

Dichlormethane (CAS 75-09-2)

Regulation (EC) No. 1907/2006, REACH Article 59(1) 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

Dichlormethane (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

Not regulated.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding

Dichlormethane (CAS 75-09-2)

Other EU regulations

Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances

Not regulated.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Dichlormethane (CAS 75-09-2)

Directive 94/33/EC on the protection of young people at work

Dichlormethane (CAS 75-09-2)

Other regulations	The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.
National regulations	Young people under 18 years old are not allow to work with this product according to the EU Directive 94/33/EC on the protection of young people at work.
15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations	CLP: Regulation No. 1272/2008. DNEL: Derived No-Effect Level. PNEC: Predicted No-Effect Concentration.
References	Not available.
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 statements or R-phrases and H-statements under Sections 2 to 15	R22 Harmful if swallowed. R36/38 Irritating to eyes and skin. R40 Limited evidence of a carcinogenic effect. R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation. H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H351 Suspected of causing cancer.
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.