RESIPLAST

SAFETY DATA SHEET of:

Polyac BDM-AL

Revision date: Thursday, January 21, 2021

S96.927

1 SECTION 1: Identification of the substance/mixture and of the company/undertaking:

1.1 Product identifier:

Polyac BDM-AL

UFI: /

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

/

Concentration in use: /

1.3 Details of the supplier of the safety data sheet:

RESIPLAST NV

Gulkenrodestraat 3

B2160 Wommelgem

Phone: 033200211 — E-mail: info@resiplast.be — Website: http://www.resiplast.be/

1.4 Emergency telephone number:

+32 70 245 245

2 SECTION 2: Hazards identification:

2.1 Classification of the substance or mixture:

Classification of the substance or mixture in accordance with regulation (EU) 1272/2008:

H225 Flam. Liq. 2 **H315 Skin Irrit. 2** **H317 Skin Sens. 1** **H334 Resp. Sens. 1** **H335 STOT SE 3** **H351 Carc. 2**

2.2 Label elements:

Pictograms:

Signal word:

Danger

Hazard statements:

H225 Flam. Liq. 2:	Highly flammable liquid and vapour.
H315 Skin Irrit. 2:	Causes skin irritation.
H317 Skin Sens. 1:	May cause an allergic skin reaction.
H334 Resp. Sens. 1:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 STOT SE 3:	May cause respiratory irritation.
H351 Carc. 2:	Suspected of causing cancer.

Precautionary statements:

P261:	Avoid breathing dust/vapours/spray.
P280:	Wear protective gloves, protective clothing, eye protection, face protection.
P342+P311:	If experiencing respiratory symptoms: Call a POISON CENTRE or doctor.
P362+P364:	Take off contaminated clothing and wash it before reuse.
P403+P233:	Store in a well-ventilated place. Keep container tightly closed.
P501:	Dispose of contents/container in accordance with local/regional/national/international regulations.

Contains:

Reaction mass of 4,4-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate 2-Ethylhexyl acrylate methyl methacrylate

2.3 Other hazards:

None

3 SECTION 3: Composition/information on ingredients:

methyl methacrylate	≤ 40 %	CAS number:	80-62-6
		EINECS:	201-297-1
		REACH Registration number:	01-2119452498-28
		CLP Classification:	**H225 Flam. Liq. 2** **H315 Skin Irrit. 2** **H317 Skin Sens. 1** **H335 STOT SE 3**
2-Ethylhexyl acrylate	≤ 9 %	CAS number:	103-11-7
		EINECS:	203-080-7
		REACH Registration number:	01-2119453158-37
		CLP Classification:	**H315 Skin Irrit. 2** **H317 Skin Sens. 1** **H335 STOT SE 3**
Reaction mass of 4,4-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate	≤ 3 %	CAS number:	
		EINECS:	905-806-4
		REACH Registration number:	01-2119457015-45
		CLP Classification:	**H315 Skin Irrit. 2** **H317 Skin Sens. 1** **H319 Eye Irrit. 2** **H332 Acute tox. 4** **H334 Resp. Sens. 1** **H335i STOT SE 3** **H351 Carc. 2** **H373i STOT RE 2**

2-hydroxyethyl methacrylate	≤ 2 %	CAS number: EINECS: REACH Registration number: CLP Classification:	868-77-9 212-782-2 01-2119490169-29 **H315 Skin Irrit. 2** **H317 Skin Sens. 1** **H319 Eye Irrit. 2**
4,4-Methylenediphenyl diisocyanate	≤ 2 %	CAS number: EINECS: REACH Registration number: CLP Classification:	101-68-8 202-966-0 01-2119457014-47 **H315 Skin Irrit. 2** **H317 Skin Sens. 1** **H319 Eye Irrit. 2** **H332 Acute tox. 4** **H334 Resp. Sens. 1** **H335i STOT SE 3** **H351 Carc. 2** **H373i STOT RE 2**
Hydrocarbons, C7-C9, isoalkanes	≤ 0.5 %	CAS number: EINECS: REACH Registration number: CLP Classification:	 921-728-3 01-2119471305-42 **H225 Flam. Liq. 2** **H304 Asp. Tox. 1** **H315 Skin Irrit. 2** **H336 STOT SE 3** **H411 Aquatic Chronic 2**
Ethyleneglycol	≤ 0.4 %	CAS number: EINECS: REACH Registration number: CLP Classification:	107-21-1 203-473-3 01-2119456816-28 **H302 Acute tox. 4** **H373n STOT RE 2**
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-	≤ 0.3 %	CAS number: EINECS: REACH Registration number: CLP Classification:	 911-490-9 01-2119979579-10 **H302 Acute tox. 4** **H315 Skin Irrit. 2** **H317 Skin Sens. 1B** **H318 Eye Dam. 1** **H412 Aquatic Chronic 3**
Hydrocarbons, C9-12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	≤ 0.2 %	CAS number: EINECS: REACH Registration number: CLP Classification:	 919-446-0 01-2119458049-33 **EUH066** **H226 Flam. Liq. 3** **H304 Asp. Tox. 1** **H336 STOT SE 3** **H372 STOT RE 1** **H411 Aquatic Chronic 2**

For the full text of the H phrases mentioned in this section, see section 16.

4 SECTION 4: First aid measures:

4.1 Description of first aid measures:

Always ask medical advice as soon as possible should serious or continuous disturbances occur.

Skin contact:	Remove contaminated clothing, rinse skin with plenty of water and immediately transport to hospital.
Eye contact:	Thoroughly rinse with water (contact lenses to be removed if this is easily done) then take to physician.
Ingestion:	Rinse mouth, do not induce vomiting, take to hospital immediately.
Inhalation:	Let sit upright, fresh air, rest and take to hospital.

4.2 Most important symptoms and effects, both acute and delayed:

Skin contact:	Redness, pain
Eye contact:	Redness, pain, blurred vision
Ingestion:	Diarrhoea, headache, abdominal cramps, sleepiness, vomiting
Inhalation:	Sore throat, cough, shortness of breath, headache

4.3 Indication of any immediate medical attention and special treatment needed:

None

5 SECTION 5: Fire-fighting measures:

5.1 Extinguishing media:

CO2, foam, powder, sprayed water

5.2 Special hazards arising from the substance or mixture:

None

5.3 Advice for firefighters:

Extinguishing agents to be avoided:	None

6 SECTION 6: Accidental release measures:

6.1 Personal precautions, protective equipment and emergency procedures:

Do not walk into or touch spilled substances and avoid inhalation of fumes, smoke, dusts and vapours by staying up wind. Remove any contaminated clothing and used contaminated protective equipment and dispose of it safely.

6.2 Environmental precautions:

Do not allow to flow into sewers or open water.

6.3 Methods and material for containment and cleaning up:

Contain released substance, store into suitable containers. If possible, remove by using absorbent material.

6.4 Reference to other sections:

For further information, check sections 8 & 13.

7 SECTION 7: Handling and storage:

7.1 Precautions for safe handling:

Handle with care to avoid spillage.

7.2 Conditions for safe storage, including any incompatibilities:

Keep in a sealed container in a closed, frost-free, ventilated room.

7.3 Specific end use(s):

/

8 SECTION 8: Exposure controls/personal protection:

8.1 Control parameters:

Listing of the hazardous ingredients in section 3, of which the TLV value is known

Hydrocarbons, C7-C9, isoalkanes 1,400 mg/m³, Hydrocarbons, C9-12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) 533 mg/m³, Ethyleneglycol 52 mg/m³, 2,6-di-tert-butyl-p-cresol 10 mg/m³

8.2 Exposure controls:

Inhalation protection:	If necessary, use an air-purifying face mask in case of respiratory hazards.	
Skin protection:	Handling with Viton-gloves (EN 374). Breakthrough time: >480' Material thickness: 0,7 mm. Thoroughly check gloves before use. Take of the gloves properly without touching the outside with your bare hands. The manufacturer of the protective gloves has to be consulted about the suitability for a specific work station. Wash and dry your hands.	
Eye protection:	Keep an eye-rinse bottle within reach. Tight-fitting safety goggles. Wear a face shield and protective suit in case of exceptional processing problems.	
Other protection:	Wear impermeable clothing. The type of protective equipment depends on the concentration and amount of hazardous substances at the work station in question.	

9 SECTION 9: Physical and chemical properties:

9.1 Information on basic physical and chemical properties:

Melting point/melting range:	/
Boiling point/Boiling range:	100 °C — 143 °C
pH:	/
pH 1% diluted in water:	/
Vapour pressure/20°C,:	51 300 Pa
Vapour density:	Not applicable
Relative density, 20°C:	1.0000 kg/l
Appearance/20°C:	Liquid
Flash point:	11 °C
Flammability (solid, gas):	Not applicable
Auto-ignition temperature:	380 °C
Upper flammability or explosive limit, (Vol %):	12.500 %
Lower flammability or explosive limit, (Vol %):	0.700 %
Explosive properties:	Not applicable
Oxidising properties:	Not applicable
Decomposition temperature:	/
Solubility in water:	Not soluble
Partition coefficient: n-octanol/water:	Not applicable

Odour:	characteristic
Odour threshold:	Not applicable
Dynamic viscosity, 20°C:	300 mPa.s
Kinematic viscosity, 40°C:	300 mm²/s
Evaporation rate (n-BuAc = 1):	1.500

9.2 Other information:

Volatile organic component (VOC):	41.67 %
Volatile organic component (VOC):	419.966 g/l
Sustained combustion test :	/

10 SECTION 10: Stability and reactivity:

10.1 Reactivity:

Stable under normal conditions.

10.2 Chemical stability:

Extremely high or low temperatures.

10.3 Possibility of hazardous reactions:

None

10.4 Conditions to avoid:

Protect from sunlight and do not expose to temperatures exceeding + 50°C.

10.5 Incompatible materials:

Acids, alkalines, oxidants, reductants

10.6 Hazardous decomposition products:

Under recommended usage conditions, hazardous decomposition products are not expected.

11 SECTION 11: Toxicological information:

11.1 Information on toxicological effects:

H315 Skin Irrit. 2:	Causes skin irritation.
H317 Skin Sens. 1:	May cause an allergic skin reaction.
H334 Resp. Sens. 1:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 STOT SE 3:	May cause respiratory irritation.
H351 Carc. 2:	Suspected of causing cancer.

Calculated acute toxicity, ATE oral:	/
Calculated acute toxicity, ATE dermal:	/

methyl methacrylate	LD50 oral, rat:	≥ 5 000 mg/kg
	LD50 dermal, rabbit:	≥ 5 000 mg/kg
	LC50, Inhalation, rat, 4h:	≥ 50 mg/l

2-Ethylhexyl acrylate	LD50 oral, rat: ≥ 5 000 mg/kg LD50 dermal, rabbit: ≥ 5 000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
Reaction mass of 4,4-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate	LD50 oral, rat: ≥ 5 000 mg/kg LD50 dermal, rabbit: ≥ 5 000 mg/kg LC50, Inhalation, rat, 4h: 11 mg/l
2-hydroxyethyl methacrylate	LD50 oral, rat: ≥ 5 000 mg/kg LD50 dermal, rabbit: ≥ 5 000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
4,4-Methylenediphenyl diisocyanate	LD50 oral, rat: ≥ 5 000 mg/kg LD50 dermal, rabbit: ≥ 5 000 mg/kg LC50, Inhalation, rat, 4h: 11 mg/l
Hydrocarbons, C7-C9, isoalkanes	LD50 oral, rat: 2 000 mg/kg LD50 dermal, rabbit: ≥ 5 000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
Ethyleneglycol	LD50 oral, rat: 500 mg/kg LD50 dermal, rabbit: ≥ 5 000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-	LD50 oral, rat: 619 mg/kg LD50 dermal, rabbit: ≥ 5 000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
Hydrocarbons, C9-12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	LD50 oral, rat: 2 000 mg/kg LD50 dermal, rabbit: ≥ 5 000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l

12 SECTION 12: Ecological information:

12.1 Toxicity:

methyl methacrylate	LC50 (Fish): > 79 mg/L (96h) NOEC (Fish): 40 mg/L (96h) EC50 (Daphnia): 69 mg/L (48h) NOEC (Daphnia): 48 mg/L (48h) EC50 (Algae): > 110 mg/L (72h) NOEC (Algae): 49 mg/L (72h)
2-Ethylhexyl acrylate	LC50 (Fish): 4.6 mg/L (96h) NOEC (Fish): 0.78 mg/L (96h) EC50 (Daphnia): 8.74 mg/L (48h) EC50 (Algae): 5.9 mg/L (72h) NOEC (Algae): < 1.8 mg/L (96h)
Reaction mass of 4,4-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate	EC50 (Daphnia): 129.7 mg/L (24h) EC50 (Algae): > 1640 mg/L (3d) EC50 (soil microorganisms): > 100 mg/L (3h)
4,4-Methylenediphenyl diisocyanate	LC50 (Fish): 1 000 mg/L EC50 (Daphnia): 1 000 mg/L EC50 (Algae): 100 mg/L

Ethyleneglycol	LC50 (Fish): EC50 (Daphnia):	72860 mg/L (96h) > 100 mg/L (48h)
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-	LC50 (Fish): EC50 (Daphnia):	>100 mg/L (96h) 48 mg/L (48h)

12.2 Persistence and degradability:

No additional data available

12.3 Bioaccumulative potential:

	Additional data:
Ethyleneglycol	Log Pow = -1,36
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-	Log Kow = 2,17

12.4 Mobility in soil:

Water hazard class, WGK (AwSV): 1

Solubility in water: Not soluble

12.5 Results of PBT and vPvB assessment:

No additional data available

12.6 Other adverse effects:

No additional data available

13 SECTION 13: Disposal considerations:

13.1 Waste treatment methods:

Draining into the sewers is not permitted. Removal should be carried out by licensed services. Possible restrictive regulations by local authority should always be adhered to.

14 SECTION 14: Transport information:

14.1 UN number:

1866

14.2 UN proper shipping name:

UN 1866 Resin Solution, 3, II, (D/E)

14.3 Transport hazard class(es):

Class(es): 3

Identification number of the hazard: 33

14.4 Packing group:

II

14.5 Environmental hazards:

Not dangerous to the environment

14.6 Special precautions for user:

Hazard characteristics:	Risk of fire. Risk of explosion. Containments may explode when heated.
Additional guidance:	Take cover. Keep out of low areas.

15 SECTION 15: Regulatory information:

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Water hazard class, WGK (AwSV):	1
Volatile organic component (VOC):	41.673 %
Volatile organic component (VOC):	419.966 g/l
Composition by regulation (EC) 648/2004:	Aliphatic hydrocarbons < 5%, Optical Brighteners < 5%

15.2 Chemical Safety Assessment:

No data available

16 SECTION 16: Other information:

Legend to abbreviations used in the safety data sheet:

ADR:	The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE:	Acute Toxicity Estimate
BCF:	Bioconcentration factor
CAS:	Chemical Abstracts Service
CLP:	Classification, Labelling and Packaging of chemicals
EINECS:	European INventory of Existing commercial Chemical Substances
LC50:	median Lethal Concentration for 50% of subjects
LD50:	median Lethal Dose for 50% of subjects
Nr.:	Number
PTB:	Persistent, Toxic, Bioaccumulative
TLV:	Threshold Limit Value
UFI:	Unique Formula Identifier
vPvB:	very Persistent and very Bioaccumulative substances
WGK:	Water hazard class
WGK 1:	Slightly hazardous for water
WGK 2:	Hazardous for water
WGK 3:	Extremely hazardous for water

Legend to the H Phrases used in the safety data sheet:

EUH066: Repeated exposure may cause skin dryness or cracking. **H225 Flam. Liq. 2:** Highly flammable liquid and vapour. **H226 Flam. Liq. 3:** Flammable liquid and vapour. **H302 Acute tox. 4:** Harmful if swallowed. **H304 Asp. Tox. 1:** May be fatal if swallowed and enters airways. **H315 Skin Irrit. 2:** Causes skin irritation. **H317 Skin Sens. 1:** May cause an allergic skin reaction. **H317 Skin Sens. 1B:** May cause an allergic skin reaction. **H318 Eye Dam. 1:** Causes serious eye damage. **H319 Eye Irrit. 2:** Causes serious eye irritation. **H332 Acute tox. 4:** Harmful if inhaled. **H334 Resp. Sens. 1:** May cause allergy or asthma symptoms or breathing difficulties if inhaled. **H335 STOT SE 3:** May cause respiratory irritation. **H335i STOT SE 3:** May cause respiratory irritation. **H336 STOT SE 3:** May cause drowsiness or dizziness. **H351 Carc. 2:** Suspected of causing cancer. **H372 STOT RE 1:** Causes damage to organs through prolonged or repeated exposure. **H373i STOT RE 2:** May cause damage to organs through prolonged or repeated exposure. **H373n STOT RE 2:** May cause damage to organs (kidneys) through prolonged or repeated exposure. **H411 Aquatic Chronic 2:** Toxic to aquatic life with long lasting effects. **H412 Aquatic Chronic 3:** Harmful to aquatic life with long lasting effects.

CLP Calculation method:

Calculation method

Reason of revision, changes of following items:

Sections: 2.1, 2.2, 3, 4.1, 9.2, 15.1, 16

SDS reference number:

ECM-110871,00

This safety information sheet has been compiled in accordance with annex II/A of the regulation (EU) No 2015/830. Classification has been calculated in accordance with European regulation 1272/2008 with their respective amendments. It has been compiled with the utmost care. We cannot, however, accept responsibility for damage, of any kind, that may be caused by using these data or the product concerned. To use this preparation for an experiment or a new application , the user must carry out a material suitability and safety study himself.