RESIPLAST

SAFETY DATA SHEET of: Episol GM A

Revision date: Friday, June 1, 2018

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

1.1 Product identifier:

Episol GM A

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

For professional use only

Concentration in use: /

1.3 Details of the supplier of the safety data sheet:

RESIPLAST NV

Gulkenrodestraat 3

B2160 Wommelgem

Phone: 033200211 — Fax: 033226380

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:

H315 Skin Irrit. 2 H317 Skin Sens. 1 H319 Eye Irrit. 2 H411 Aquatic Chronic 2

2.2 Label elements:

Pictograms:



Signal word:

Warning

Hazard statements:

H315 Skin Irrit. 2: Causes skin irritation.

H317 Skin Sens. 1: May cause an allergic skin reaction.

H319 Eye Irrit. 2: Causes serious eye irritation.

H411 Aquatic Chronic 2: Toxic to aquatic life with long lasting effects.

Precautionary statements:

P280: Wear protective gloves, protective clothing, eye protection, face protection.

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P337+P313: If eye irritation persists: Get medical advice/attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

Contains:

Pine Oil Reaction product of Bisphenol-A-epichlorhydrin epoxy resin (average molecular weight ≤ 700) 1,6-bis(2,3-epoxypropoxy)hexane

2.3 Other hazards:

None

3 SECTION 3: Composition/information on ingredients:

| Reaction product of Bisphenol-A-epichlorhydrin epoxy resin (average molecular weight ≤ 700) | ≤ 70 % | CAS number: EINECS: REACH Registration number: CLP Classification: | 1675-54-3 216-823-5 01-2119456619-26 H315 Skin Irrit. 2 H317 Skin Sens. 1 H319 Eye Irrit. 2 H411 Aquatic Chronic 2 |
|---|--------|--|---|
| 1,6-bis(2,3-epoxypropoxy)hexane | ≤ 20 % | CAS number: EINECS: REACH Registration number: CLP Classification: | 16096-31-4 240-260-4 01-2119463471-41 H315 Skin Irrit. 2 H317 Skin Sens. 1 H319 Eye Irrit. 2 H412 Aquatic Chronic 3 |
| p-Menth-1-en-8-ol | ≤8% | CAS number: EINECS: REACH Registration number: CLP Classification: | 8000-41-7 232-268-1 01-2119553062-49 H315 Skin Irrit. 2 H319 Eye Irrit. 2 |

| Pine Oil | ≤ 5 % | CAS number: | 68956-56-9 |
|----------|-------|----------------------------|---|
| | | EINECS: | 273-309-3 |
| | | REACH Registration number: | 01-2119980606-28 |
| | | CLP Classification: | H226 Flam. Liq. 3 H304 Asp. Tox. 1 H315 Skin Irrit. 2 H317 Skin Sens. 1 H319 Eye Irrit. 2 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, if necessary seek

medical attention.

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

None

avoided:

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):

For professional use only

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

8.2 Exposure controls:

| Inhalation protection: | If necessary, use an air-purifying face mask in case of respiratory hazards. | |
|------------------------|--|--|
| Skin protection: | Handling with nitril-gloves (EN 374). Breakthrough time: >480' Material thickness: 0,35 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: 190 °C — 220 °C

pH: /
pH 1% diluted in water: /
Vapour pressure/20°C,: /

Vapour density: Not applicable

Relative density, 20°C:

Appearance/20°C: Liquid

Flash point: /

Flammability (solid, gas): Not applicable

Auto-ignition temperature: /
Upper flammability or explosive /

limit, (Vol %):

Lower flammability or explosive

limit, (Vol %):

Explosive properties: Not applicable

Oxidising properties: Not applicable

Decomposition temperature:

Solubility in water: Not soluble

Partition coefficient: n- Not applicable

octanol/water:

Odour: characteristic
Odour threshold: Not applicable

Dynamic viscosity, 20°C: /
Kinematic viscosity, 40°C: /
Evaporation rate (n-BuAc = 1): /

9.2 Other information:

Volatile organic component (VOC): 11.29 %

Volatile organic component (VOC): /
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.H319 Eye Irrit. 2: Causes serious eye irritation.

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

dermal:

| Reaction product of Bisphenol-A-epichlorhydrin epoxy resin (average molecular weight ≤ 700) | LD50 oral, rat: LD50 dermal, rabbit: LC50, Inhalation, rat, 4h: | ≥ 5 000 mg/kg ≥ 5 000 mg/kg ≥ 50 mg/l |
|---|---|---|
| 1,6-bis(2,3-epoxypropoxy)hexane | LD50 oral, rat: LD50 dermal, rabbit: LC50, Inhalation, rat, 4h: | 2 900 mg/kg ≥ 5 000 mg/kg ≥ 50 mg/l |
| p-Menth-1-en-8-ol | LD50 oral, rat: LD50 dermal, rabbit: LC50, Inhalation, rat, 4h: | 2 760 mg/kg ≥ 5 000 mg/kg ≥ 50 mg/l |
| Pine Oil | LD50 oral, rat: LD50 dermal, rabbit: LC50, Inhalation, rat, 4h: | 2 760 mg/kg ≥ 5 000 mg/kg ≥ 50 mg/l |

12 SECTION 12: Ecological information:

12.1 Toxicity:

| Reaction product of Bisphenol-A-epichlorhydrin epoxy resin (average molecular weight ≤ 700) | LC50 (Fish): EC50 (Daphnia): EC50 (Algae): NOEC (Algae): | 3.6 mg/L (96h) 1.1 mg/L (48h) 9.1 mg/L (48h) 2.4 mg/L (72h) |
|---|--|--|
| 1,6-bis(2,3-epoxypropoxy)hexane | LC50 (Fish): EC50 (Daphnia): | 30 mg/L (96h) ca. 57 mg/L (48h) |
| p-Menth-1-en-8-ol | LC50 (Fish): LC50 (Daphnia): NOEC (Daphnia): EC50 (Algae): NOEC (Algae): | 62 - 80 mg/L (48h) 73 mg/L (48h) 40 mg/L (48h) ca. 68 mg/L (72h) ca. 68 mg/L (72h) |
| Pine Oil | LC50 (Fish): NOEC (Daphnia): EC50 (soil microorganisn | 5.07 mg/L (96h) 1.6 mg/L (48h) ns): 365 mg/L (3h) |

12.2 Persistence and degradability:

No additional data available

12.3 Bioaccumulative potential:

No additional data available

12.4 Mobility in soil:

Water hazard class, WGK (AwSV): 3

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

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.

SECTION 14: Transport information:

14.1 UN number:

3082

14.2 UN proper shipping name:

UN 3082 Environmentally hazardous substance, liquid, n.o.s. (mixture with Pine Oil; Reaction product of Bisphenol-Aepichlorhydrin epoxy resin (average molecular weight ≤ 700)), 9, III, (E)

14.3 Transport hazard class(es):

Class(es): 9 90

Identification number of the

hazard:

14.4 Packing group:

Ш

14.5 Environmental hazards:

Environmentally hazardous

14.6 Special precautions for user:

Hazard characteristics: Risk to the aquatic environment and the sewerage system.

Additional guidance:



15 SECTION 15: Regulatory information:

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

Water hazard class, WGK (AwSV): 3

Volatile organic component (VOC): 11.290 %

Volatile organic component (VOC): /
Composition by regulation (EC) None

648/2004:

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

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:

H226 Flam. Liq. 3: Flammable liquid and vapour.
 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.
 H319 Eye Irrit. 2: Causes serious eye irritation.
 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:

Section: 9.2

SDS reference number:

ECM-106411,00

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.