

SKYBON ES 245

MATERIAL SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier:

Trade name: SKYBON ES 245

Another name: Saturated Copolyester resin

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

Relevant identified uses: Binder resin

Uses advised against: No data available.

1.3 Details of the supplier of the safety data sheet:

SK Chemicals

686 Sampyeong-dong, Bundang-gu, Seongnam-si, Gyeonggi-do 463-400 Korea

1.4 Emergency telephone number: +82 2 2008 2008

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture: Substance is not classified as hazardous in terms of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Classification according to Regulation (EC) No 1272/2008: -

Classification according to Directive 67/548/EEC: -

2.2 Label elements:

Labelling according to Regulation (EC) No 1272/2008: Not applicable.

2.3 Other hazards: No data available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances:

| Product identifier type in accordance with Article 18(2) of Regulation (EC) No 1272/2008 | Identifier number | Identification name | Weight % content (or range) |
|--|-------------------|---------------------|-----------------------------|
| CAS number | - | SKYBON ES 245 | 100 |

¹Substance is classified in terms of Regulation (EC) No. 1272/2008 Annex VI.

²Substance with workplace exposure limits.

3.2 Mixtures: Not relevant.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

In case of respiratory exposure: Remove to fresh air. Get medical attention for any breathing difficulty.

In case of skin contamination: Remove contaminated clothing and wash exposed area with soap and water. Get medical attention if irritation develops or persists.

In case of intrusion into eye: Flush eyes with plenty of water for at least 15 minutes, lifting the upper and lower eyelids. If irritation persists, get medical attention.

In case of oral intake: Rinse mouth. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed: No data available.

4.3 Indication of any immediate medical attention and special treatment needed: No data available.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media: No data available.

5.2 Special hazards arising from the substance or mixture: No data available.

5.3 Advice for firefighters: In the event of a fire, wear self-contained breathing apparatus and protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Wear appropriate personal protective equipment as specified in Section 8. Ensure adequate ventilation.

For emergency responders: No data available.

6.2 Environmental precautions: Avoid dispersal of spilled material and contact with soil, ground and surface water, drains and sewers.

6.3 Methods and material for containment and cleaning up: Collect the material in labeled containers and dispose of according to local and regional authority requirements.

6.4 Reference to other sections: No data available.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling: Handle in well ventilated work space. Wash thoroughly after handling. Do not eat, drink and smoke in work areas. Wear appropriate personal protective equipment as specified in Section 8.

7.2 Conditions for safe storage, including any incompatibilities: Store in cool, dry and well-ventilated place.

7.3 Specific end use(s): No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: Community workplace exposure limits were not established.

8.2 Exposure controls: Do not eat, drink or smoke when using this product. Remove all contaminated clothing. Wash contaminated clothing before reuse. Wash hands before breaks and at the end of work.

8.2.1 Appropriate engineering controls: Use adequate ventilation.

8.2.2 Individual protection measures, such as personal protective equipment:

8.2.2.1 Eye/face protection: Wear appropriate safety glasses or goggles where eye contact is possible.

8.2.2.2 Skin protection:

Hand protection: Wear appropriate protective gloves.

Other: Wear appropriate protective clothing.

8.2.2.3 Respiratory protection: If ventilation is insufficient, use suitable respiratory protection.

8.2.2.4 Thermal hazards: No data available.

8.2.3 Environmental exposure controls: Do not allow to enter sewers, surface and ground water.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

| | |
|--|---|
| Appearance: | pale granules |
| Odour: | odorless |
| Odour threshold: | - |
| pH: | - |
| Melting point/freezing point: | - |
| Initial boiling point and boiling range: | - |
| Flash point: | - |
| Evaporation rate: | - |
| Flammability (solid, gas): | - |
| Upper/lower flammability or explosive limits: | - |
| Vapour pressure (1732°C): | <1 mmHg (20°C) |
| Vapour density: | - |
| Relative density: | 1,26 g/cm ³ (H ₂ O= 1 g/cm ³) |

| | |
|---|-----------------|
| Solubility(ies): | - |
| Partition coefficient: n-octanol/water: | - |
| Auto-ignition temperature: | - |
| Decomposition temperature: | - |
| Viscosity: | 0.74± 0.03 dl/g |
| Explosive properties: | - |
| Oxidising properties: | - |

9.2 Other information: Softening point/interval: 137 ± 5

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: No data available.

10.2 Chemical stability: The product is stable under normal conditions.

10.3 Possibility of hazardous reactions: No data available.

10.4 Conditions to avoid: No data available.

10.5 Incompatible materials: No data available.

10.6 Hazardous decomposition products: No data available.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Substances: No data available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity: No data available.

12.2 Persistence and degradability: No data available.

12.3 Bioaccumulative potential: No data available.

12.4 Mobility in soil: No data available.

12.5 Results of PBT and vPvB assessment: No data available.

12.6 Other adverse effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods: Dispose off in accordance with local and national regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number: Not applicable. The substance is not subject to international regulations on transport of dangerous goods.

14.2 UN proper shipping name: Not applicable.

14.3 Transport hazard class(es): Not applicable.

14.4 Packing group: Not applicable.

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user: Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

SECTION 15: REGULATORY INFORMATION

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

The substance is not subject to authorisation under Title VII or restrictions under Title VIII of Regulation (EC) No. 1907/2006.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/;

Regulation (EC) No 1272/2008 of the European parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006;

COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH);

DIRECTIVE 1999/45/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations;

COUNCIL DIRECTIVE of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances (67/548/EEC).

15.2 Chemical safety assessment: Chemical safety assessment is not available.

SECTION 16: OTHER INFORMATION

List of relevant hazard statements: -

Instructions for the training: Product handling instruction shall be included into the educational system about the safety work (initial training, training at the workplace, repeated training) according to specific conditions at the workplace.

Recommended restrictions on use (i.e. non-statutory recommendations by supplier):

Substance should not be used for any other purpose than for which is appointed (point 1.2). Because of the fact that specific conditions of use of substance are out of supplier's control, it is responsibility

of the user to adjust the prescribed warnings to local laws and regulations. Safety information describes the product in terms of safety and it cannot be considered as technical information about product.

Sources of key data used to compile the Safety Data Sheet: SDS was elaborated according to requirements set in Annex II of Regulation (EC) No 1907/2006 of the European Parliament and of the Council. SDS was prepared using data from the producer.

Purpose of SDS: Purpose of this SDS is to provide relevant information for users of product to ensure proper handling and control of risks/hazards.