

SAFETY DATA SHEET

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

Company:

Brandenburg UK Limited, 29, Navigation Drive, Hurst Business Park, Brierley Hill
 West Midlands, DY5 1UT, United Kingdom.

Emergency Telephone Number: +44 1384 472900,

Technical Assistance Telephone Number: +44 1384 472900

| | |
|--|--------------------------------------|
| 1.1 Product identifier | Glue Boards for EFK, Glue 146 |
| Product code | |
| 1.2 Relevant identified uses of the substance or mixture and uses advised against | Hot Melt Adhesive |

| |
|--|
| SECTION 2: Hazards identification |
|--|

2.1 Classification

Classification (1999/45/EC)

This product is not classified as flammable, harmful or dangerous for the environment.

Classification CLP (1272/2008/EC)

This product is not classified as flammable, harmful or dangerous for the environment.

2.2 Label elements

Pictogram

None

Signal Word

-

Containing substances

Styrene-isoprene copolymer. Naphtha (petroleum), light steam cracked, debenzenized, polymers, hydrogenated, White mineral oil (petroleum)

Hazard statement Code(s)

None

Suppl. Hazard statement Code(s)

EUH210 Safety data sheet available on request.

EUH208 Contains Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate. May produce an allergic reaction. |

Precautionary statements

None

2.3 Other hazards

This product is not considered to contain any substances that meet the criteria for classification as PBT or vPvB substances.

Eye: As supplied: irritant as a foreign body. As used: severe thermal hazard

Skin contact: As supplied: no hazard. As used: severe thermal hazard.

Inhalation: Vapours and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.

Ingestion: Low oral toxicity.

Physical-chemical: No unusual hazards are expected.

Environmental: Adverse effects would not be expected.

SAFETY DATA SHEET

SECTION 3: Composition/information on ingredients

3.2 Chemical composition: Mixture. Hot Melt Adhesive

| Components | CAS-No EC-No Reg-No | Conc. % | Symbol & R- phrases* | Hazard Class & Category Code* | Hazard statement Code(s)* |
|--|--|------------|----------------------------|--|---------------------------------|
| Styrene-isoprene copolymer | 25038-32-8 607-504-5 | 5-10 | - | - | - |
| Naphtha (petroleum), light steam cracked, debenzenized, polymers, hydrogenated | 68132-00-3 614-305-7 | 40-50 | - | - | - |
| White mineral oil (petroleum) | 8042-47-5 232-455-8 | 40-50 | - | - | - |
| Stabilisers | - | <1 | - | - | - |
| Antioxidants | - | <0,5 | - | - | - |
| Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate | 41556-26-7 255-437-1 01-2119491304-40-xxxx | <0,25 | N; R50/53 Xi; R43 | Skin Sens. 1 Aquatic Acute 1 Aquatic Chronic 1 | H317 H400 H410 |

* The full text of Risk phrases and Hazard statement Codes are listed under section 16.
 The classification is based on data from the chemical supplier and www.ecb.europa.eu (Databases)
 Ingredients not listed are classified as non-hazardous or at a concentration below reportable levels.

Explanation of symbols

T= Toxic; T+= Very toxic; C= Corrosive; Xn= Harmful; Xi= Irritant; O= Oxidizing; E= Explosive;
 F= Highly flammable; F+= Extremely flammable; N= Dangerous to the environment

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Never give fluids or induce vomiting if patient is unconscious. Keep person warm and calm. In all cases of doubt, or when symptoms persist, seek medical advice.

Inhalation

Remove to fresh air. Get medical attention if irritation persists.

Skin contact

If hot: flush with cool water. Treat as wax or resin burn. Do not attempt to remove solidified adhesive. Get medical attention immediately. As supplied: non-hazardous.

Eye contact

If hot: flush with cool water. Treat as wax or resin burn. Do not attempt to remove solidified adhesive. Get medical attention immediately. As supplied: remove as foreign body.

Ingestion

None required.

SAFETY DATA SHEET

SECTION 4: First aid measures (...)

4.2 Most important symptoms and effects, both acute and delayed

| | |
|----------------------|---|
| Inhalation: | Vapours and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract. |
| Skin contact: | As supplied: no hazard. As used: severe thermal hazard. |
| Eye contact: | As supplied: irritant as a foreign body. As used: severe thermal hazard. |
| Ingestion: | Low order of toxicity. |

4.3 Indication of any immediate medical attention and special treatment needed

-

SECTION 5: Firefighting measures

5.1 Extinguishing media

Water spray, fog or mist, foam, powder, carbon dioxide.

Unsuitable Extinguishing Media: Water jet.

5.2 Special hazards arising from the substance or mixture

Combustible at high temperatures.

Carbon monoxide, carbon dioxide, unknown hydrocarbons.

5.3 Special protective equipment

Appropriate breathing apparatus may be required.

Additional information

Cool endangered containers with water in case of fire.

Flash point >200°C

Special fire fighting procedures

No special procedures are required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid contact with skin and eyes.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3 Methods and material for containment and cleaning up

Re-use product if possible. Collect the waste mechanically.

Place in container for disposal according to local regulations.

6.4 Reference to other sections

See section 7 for proper handling and storage.

For personal protection see section 8.

For disposal of spillage, see section 13.

SAFETY DATA SHEET

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Normal precautions taken when handling chemicals should be observed. Precaution: this product should only be heated to recommended temperatures. The hazards of pyrolysis products are unknown.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry area.

7.3 Specific end use(s)

-

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Appropriate engineering controls

Normal ventilation should be adequate for small volumes.

Swedish limit values or limit values according to the European commission

| Substance | CAS-No | Level limit value | Ceiling limit value | Short time value |
|--------------------------------------|--------|----------------------|---------------------|---------------------|
| Oil mist, incl. oil fumes | - | 1 mg/m ³ | - | 3 mg/m ³ |
| Dust, inorganic – inhalable dust | - | 10 mg/m ³ | - | - |
| Dust, inorganic – respirable dust | - | 5 mg/m ³ | - | - |

DNEL

Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7)

Long term exposure – Workers
 Systematic effects, inhalation: 2,35 mg/m³
 Short term exposure – Workers
 Systematic effects, inhalation: 2,35 mg/m³
 Long term exposure – Workers
 Systematic effects, dermal: 2,5 mg/kg mg/kg/day
 Short term exposure – Workers
 Systematic effects, dermal: 2,5 mg/kg mg/kg/day
 Long term exposure – Consumers
 Systematic effects, inhalation: 0,58 mg/m³
 Short term exposure – Consumers
 Systematic effects, inhalation: 0,58 mg/m³
 Long term exposure – Consumers
 Systematic effects, dermal: 1,25 mg/kg mg/kg/day
 Short term exposure – Consumers
 Systematic effects, dermal: 1,25 mg/kg mg/kg/day
 Long term exposure – Consumers
 Systematic effects, oral: 1,25 mg/kg mg/kg/day
 Short term exposure – Consumers
 Systematic effects, oral: 1,25 mg/kg mg/kg/day

SAFETY DATA SHEET

SECTION 8: Exposure controls/personal protection (...)

PNEC

| | | |
|---|--------------|---------------------------|
| Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7) | 0,0022 mg/l | Freshwater |
| Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7) | 0,00022 mg/l | Seawater |
| Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7) | 0,009 mg/l | Water (Temporary release) |
| Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7) | 1 mg/l | STP |
| Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7) | 1,05 mg/kg | Sediment (Freshwater) |
| Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7) | 0,11 mg/kg | Sediment (Seawater) |
| Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7) | 0,21 mg/kg | Soil |

8.2 Exposure controls

General protective and hygiene measures

Wash hands before breaks and after work. Avoid contact with eyes and skin.

The usual precautionary measures for the handling of chemicals have to be observed.

Individual protection measures, such as personal protective equipment

Always consult a competent person/supplier when selecting personal protective equipment

Respiratory protection

None required if good ventilation is maintained.

Hand protection

Rubber or thermally resistant gloves should be worn.

Eye protection

Not required when used as intended.

Body protection

Not required when used as intended.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|---|----------------|
| Form: | Solid |
| Colour: | Colourless |
| Odour: | Negligible |
| Odour threshold: | Not determined |
| pH: | Not applicable |
| Melting point/freezing point (°C): | Not determined |
| Initial boiling point and boiling range(°C): | > 200 |
| Flash point(°C): | > 200 |
| Evaporation rate(°C): | Not applicable |
| Flammability (solid, gas): | Not determined |
| Upper flammability or explosive limits: | Not determined |
| Lower flammability or explosive limits: | Not determined |

SAFETY DATA SHEET

SECTION 9: Physical and chemical properties (...)

| | |
|--|-------------------|
| Vapour pressure (20°C): | Not applicable |
| Vapour density: | Not applicable |
| Solubility in water: | Insoluble |
| Partition coefficient: n-octanol/water: | Not determined |
| Auto-ignition temperature: | Not determined |
| Decomposition temperature: | Not determined |
| Density: | Not determined |
| Viscosity: | 800 - 1.400 mPa s |
| Explosive properties: | None |
| Oxidising properties: | None |

9.2 Other information

No specific.

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage and handling conditions.

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

-

10.4 Conditions to avoid

None under recommended storage and handling conditions.

10.5 Incompatible materials

None under recommended storage and handling conditions.

10.6 Hazardous decomposition products

No hazardous decompositions products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

See section 4. (Most important symptoms and effects, both acute and delayed)

Toxicology data

Information about this preparation is not available.

Toxicology data for the containing components:

White mineral oil (petroleum) -Toxicity by ingestion: LD₅₀ Oral rat: >5000 mg/kg body weight

Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7): LD₅₀ Oral rat: 2369-3920 mg/kg

Effects of chronic exposure

Although this product has not been tested for chronic effects it is judged as having a low order of toxicity based on component information. Use of good industrial hygiene practices is recommended.

Routes of exposure

Eyes and skin.

Allergenic potential

The product is not classified as allergenic by inhalation or skin contact. But contains less than 0,25% Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate. That may produce an allergic reaction.

SAFETY DATA SHEET

SECTION 11: Toxicological information (...)

Carcinogenicity, mutagenicity and toxicity for reproduction

This product is not classified as carcinogen, mutagen and toxic for reproduction.

Other information

None.

SECTION 12: Ecological information

This product is not classified as dangerous for the environment.

Do not flush into surface water or sanitary sewer system.

12.1 Toxicity

Information about this preparation is not available.

Toxicology data for the containing components:

White mineral oil (petroleum): LC₅₀ Fish 96h: >10000 mg/l Species: Lepomis macrochirus

Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7):

LC₅₀ Fish 96h: 0,97 mg/l Species: Lepomis macrochirus

EC₅₀ Daphnia 24h: 20 mg/l Species: Daphnia magna

12.2 Persistence and degradability

24% degraded in 28 days OECD 301B - White mineral oil (petroleum)

12.3 Bioaccumulative potential

-

12.4 Mobility in soil

-

12.5 Results of PBT and vPvB assessment

This product is not considered to contain any substances that meet the criteria for classification as PBT or vPvB substances.

12.6 Other adverse effects

No known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

This product or residues of this product are not classified as hazardous waste.

Dispose of in accordance with local authority requirements.

EWC code: Depends on line of business and use.

Disposal of Packaging

Well cleaned packaging could be left for recycling

SECTION 14: Transport information

The product is not classified as dangerous goods according to ADR/RID, IMDG, DGR.

14.1 UN number

-

14.2 UN proper shipping name

-

14.3 Transport hazard class(es)

-

SAFETY DATA SHEET

SECTION 14: Transport information (...)

14.4 Packing group

-

14.5 Environmental hazards

Marine Pollutant: No

14.6 Special precautions for user

-

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

-

SECTION 15: Regulatory information

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

Classification according to CLP (1272/2008/EC)

15.2 Chemical safety assessment

None.

SECTION 16: Other information

The full text of Risk phrases and Hazard statement Codes listed under section 3:

R43 May cause sensitization by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Sources

Safety data sheet provided by the manufacturer. CLP-regulation, www.kemi.se, www.ecb.europa.eu (Databases)

Revision 2: 2014-10-24. Safety data sheet according to Regulation (EC) No. 1907/2006 and (EG) 453/2010

Previous versions

Revision 1: 2013-06-17

Abbreviations explanations

ADR: :International Carriage of Dangerous Goods by Road

BCF: Bio Concentration Factor

CAS-nr: Chemical Abstracts Service number

EC₅₀: Effect Concentration

EG-nr: A substance number i EINECS, ELINCS or in No-Longer Polymers List.

IMDG: International Maritime Dangerous Goods Code.

LC₅₀: Lethal Concentration

LD₅₀: Lethal Dose

IC₅₀: Median Inhibition Concentration

NOEC: No Observed Effect Concentration

PBT-substance: Persistent, Bio accumulative and Toxic substances.

vPvB-substance; Very persistent and Very Bio accumulative substances.