

1. Identification of the substance/mixture and of the company/undertaking

Product identifier: Glue Boards for EFK, Glue 146

Relevant identified uses of the substance or mixture and uses advised against: Hot Melt Adhesive

Details of the supplier of the safety data sheet: Brandenburg UK Limited
29 Navigation Drive, Hurst Business Park,
Brierley Hill, West Midlands, DY5 1UT
United Kingdom

Emergency Contact: +44 1384 472900

Technical Assistance: +44 1384 472900

2. Hazard Identification

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.

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

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

Hazard Identification continued

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:	Vapors 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.

3. Composition – Information on Ingredients

Chemical composition: Mixture. Hot Melt Adhesive.

Components	CAS-No EC-No Reg-No	Conc. %
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
Stabilizers	-	< 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

Composition – Information on Ingredients continued

Components	Symbol & R-phrases*	Hazard Class & Category Code*	Hazard statement Code(s)*
Styrene-isoprene copolymer	-	-	-
Naphtha (petroleum), light steam cracked, debenzenized, polymers, hydrogenated	-	-	-
White mineral oil (petroleum)	-	-	-
Stabilizers	-	-	-
Antioxidants	-	-	-
Bis(1,2,2,6,6- pentamethyl-4-piperidyl) sebacate	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

4. First Aid Measures

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.

First Aid Measures continued

Most important symptoms and effects, both acute and delayed:

Inhalation:	Vapors 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.

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

5. Fire-Fighting Measures

Extinguishing media:	Water spray, fog or mist, foam, powder, carbon dioxide.
Unsuitable Extinguishing Media:	Water jet.
Special hazards arising from the substance:	Combustible at high temperatures. Carbon monoxide, carbon dioxide, unknown hydrocarbons.
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.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Avoid contact with skin and eyes.

Environmental precautions:

Do not flush into surface water or sanitary sewer system.

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.

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.

7. Handling and Storage

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.

Conditions for safe storage, including any incompatibilities:

Store in a cool, dry area.

Specific end use(s):

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8. Exposure Controls/Personal Protection

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:

Exposure	Type	Route	Value
Long term	Workers Systematic effects	Inhalation	2,35 mg/m ³
Short term	Workers Systematic effects	Inhalation	2,35 mg/m ³
Long term	Workers Systematic effects	Dermal	2,5 mg/kg mg/kg/day
Short term	Workers Systematic effects	Dermal	2,5 mg/kg mg/kg/day
Long term	Consumers Systematic effects	Inhalation	0,58 mg/m ³
Short term	Consumers Systematic effects	Inhalation	0,58 mg/m ³
Long term	Consumers Systematic effects	Dermal	1,25 mg/kg mg/kg/day
Short term	Consumers Systematic effects	Dermal	1,25 mg/kg mg/kg/day
Long term	Consumers Systematic effects	Oral	1,25 mg/kg mg/kg/day
Short term	Consumers Systematic effects	Oral	1,25 mg/kg mg/kg/day

Exposure Controls/Personal Protection continued

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)	0,0022 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

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.

9. Physical and Chemical Properties

Information on basic physical and chemical properties:

Form:	Solid.	Odor:	Negligible.
Color:	Colorless.	Odor 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.
Vapor pressure (20°C):	Not applicable.
Vapor 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.
Oxidizing properties:	None.
Other information:	No specific.

10. Stability and Reactivity

Reactivity:	Stable under recommended storage and handing conditions.
Chemical stability:	Stable.
Possibility of hazardous reactions:	-
Conditions to avoid:	None under recommended storage and handing conditions.
Incompatible materials:	None under recommended storage and handing conditions.
Hazardous decomposition products:	No hazardous decompositions products known.

11. Toxicological Information

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:

Component	Toxicity by ingestion LD50 Oral rat
White mineral oil (petroleum)	> 5000 mg/kg body weight
Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (41556-26-7)	2369-3920 mg/kg body weight

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.

Carcinogenicity, mutagenicity and toxicity for reproduction: This product is not classified as carcinogen, mutagen and toxic for reproduction.

Other information: None.

12. Ecological Information

This product is not classified as dangerous for the environment.

Do not flush into surface water or sanitary sewer system.

Toxicity: Information about this preparation is not available.

Ecological Information continued

Toxicology data for the containing components:

Components (CAS-No.)	Type	Value	Acute Toxicity Study	Exp. Time	Species
White mineral oil (petroleum)	LC50	> 10,000 mg/l	Fish	96 h	<i>Lepomis macrochirus</i>
Bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (41556-26-7)	LC50	0,97 mg/l	Fish	96 h	<i>Lepomis macrochirus</i>
	EC50	20 mg/l	Daphnia	24 h	<i>Daphnia magna</i>

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

Bioaccumulative potential: -

Mobility in soil: -

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.

Other adverse effects: No known.

13. Disposal Considerations

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.

14. Transportation Information

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

UN number:	-
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-

Environmental hazards: Marine Pollutant: No

Special precautions for user: -

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

15. Regulatory Information

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

Classification according to CLP (1272/2008/EC)

Chemical safety assessment:

None.

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)

Other Information continued

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 in 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