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

1.1 Product identifier
Trade name/designation: PMMA Edgeband

Other means of identification:
Voluntary safety information following the Safety Data Sheet format according to Regulation (EC) No. 1907/2006 (REACH). Products: Molded parts of varying size and geometry. The products are not subject to Regulation [EC] no. 1272/2008 (CLP) and do not require labeling according to this regulation.

Additional information:
Products: Molded parts of varying size and geometry.

1.2 Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture:
Industrial uses.
Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet:
Manufacturer/Supplier: SURTECO GmbH
Beisenstr. 50
45964 Gladbeck
Germany

Telephone: +49 2043 979-0
Telefax: +49 2043 979-364
E-mail: info@surteco.com
Website: www.surteco.com
E-mail (competent person): info@surteco.com

1.4 Emergency telephone number:
24h: +49 551 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 (CLP):
The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 (CLP).

2.2 Label elements
Labelling according to Regulation (EC) No. 1272/2008 (CLP)
According to EC directives or the corresponding national regulations the product does not have to be labelled.
Hazard statements -
Supplemental hazard information (EU): -
Precautionary statements - General: -

2.3. Other hazards:
Adverse physicochemical effects:
Specific end use(s): Electrostatically charged moldings can become a source of ignition for other materials or damage electronic components.
See section 7.1
Adverse human health effects and symptoms:
Mechanical processing may cause dust. May cause eye irritation. May cause respiratory irritation. May cause skin irritation. Damage can be caused through mechanical influence of the product.

Adverse environmental effects:
This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

SECTION 3: Composition/information on ingredients

3.1 Mixtures
Description:
Reaction product of Methyl methacrylate, Butyl acrylate, Styrene and additives.

SECTION 4: First aid measures

4.1 Description of first aid measures
General information:
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If unconscious place in recovery position and seek medical advice. Do not leave affected person unattended. Mechanical processing may cause dust.

Following inhalation:
Particulates and dust: May cause respiratory irritation. Provide fresh air.

In case of skin contact:
Particulates and dust: May cause skin irritation. After contact with molten product, cool skin area rapidly with cold water. Burns caused by molten material must be treated clinically.

After eye contact:
Particulates and dust: Do not subject to friction. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention.

After ingestion:
Get medical advice/attention if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed
No known symptoms to date.

4.3 Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media:
Water spray jet, alcohol resistant foam, Extinguishing powder, Carbon dioxide (CO2).
Co-ordinate fire-fighting measures to the fire surroundings.
5.2 Special hazards arising from the substance or mixture
The melted product can cause severe burns. softening point: See section 9.

Hazardous combustion products:
In case of fire may be liberated: Pyrolysis products, toxic (Acrylonitrile, 1,3-Butadiene, Styrene); carbon oxides (COx), Hydrogen cyanide (hydrocyanic acid), Gases/vapours, toxic.

5.3 Advice for firefighters
Wear a self-contained breathing apparatus and chemical protective clothing. Suppress gases/vapours/mists with water spray jet.

5.4 Additional information
Suppress gases/vapours/mists with water spray jet. Move undamaged containers from immediate hazard area if it can be done safely. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel
Personal precautions:
Mechanical processing may cause dust. Avoid dust formation. Avoid breathing dust. Keep away from heat. The melted product can cause severe burns. Remove persons to safety.

Protective equipment:
Wear protective gloves/protective clothing/eye protection/face protection. See section 8.

6.1.2 For emergency responders
Personal protection equipment:
Personal protection equipment: see section 8

6.2 Environmental precautions
Do not allow to enter into surface water or drains.
Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up
For containment:
Take up mechanically.

For cleaning up:
Water (with cleaning agent)

6.4 Reference to other sections
Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

6.5 Additional information
Use appropriate container to avoid environmental contamination.
SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

Advices on safe handling:
Mechanical processing may cause dust. Avoid breathing dust. Wear personal protection equipment (refer to section 8). Additional protective measures: Take precautionary measures against static discharge. Electrostatically charged moldings can become a source of ignition for other materials or damage electronic components.

Fire prevent measures:
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

Environmental precautions:
Discharge into the environment must be avoided.

Advices on general occupational hygiene
When using do not eat, drink or smoke. Wash hands and face before breaks and after work and take a shower if necessary. Wash contaminated clothing before reuse. Apply skin care products after work.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:
Store in a well-ventilated place. Keep container tightly closed.

Requirements for storage rooms and vessels:
No special measures are necessary.

Hints on storage assembly:
Do not store together with: Oxidising agent, strong; ester; Ketone; aromatic hydrocarbons; halogenated hydrocarbons

7.3 Specific end use(s):
Recommendation:
Industrial uses.
SECTION 8: Exposure controls/Personal protection

8.1 Control parameters:

8.1.1 Occupational exposure limit values

<table>
<thead>
<tr>
<th>Limit value type [country]</th>
<th>Substance name</th>
<th>1) Long-term occupational exposure limit value</th>
<th>2) Short-term occupational exposure limit value</th>
<th>3) Instantaneous value</th>
<th>4) Monitoring and observation processes</th>
<th>5) Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL (GB)</td>
<td>Dust, respirable fraction</td>
<td>1) 4 mg/m³</td>
<td>5) Dust limit value respirable fraction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WEL (GB)</td>
<td>Dust, inhalable fraction</td>
<td>1) 10 mg/m³</td>
<td>5) Dust limit value inhalable fraction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WEL (GB)</td>
<td>styrene CAS No.: 100-42-5</td>
<td>1) 100 ppm [430 mg/m³]</td>
<td>2) 250 ppm [1,080 mg/m³]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WEL (GB)</td>
<td>methyl methacrylate CAS No.: 80-62-6</td>
<td>1) 50 ppm [208 mg/m³]</td>
<td>2) 100 ppm [416 mg/m³]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IOELV (EU)</td>
<td>methyl methacrylate CAS No.: 80-62-6</td>
<td>1) 50 ppm</td>
<td>2) 100 ppm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IOELV (EU)</td>
<td>butyl acrylate CAS No.: 141-32-2</td>
<td>1) 2 ppm [11 mg/m³]</td>
<td>2) 10 ppm [53 mg/m³]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WEL (GB)</td>
<td>butyl acrylate CAS No.: 141-32-2</td>
<td>1) 1 ppm [5 mg/m³]</td>
<td>2) 5 ppm [26 mg/m³]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.1.2 Biological limit values
No data available.

8.1.3 DNEL-/PNEC-values
No data available.

8.2 Exposure controls

8.2.1 Appropriate engineering controls
Technical measures and the application of suitable work processes have priority over personal protection equipment. Provide adequate ventilation as well as local exhaust at critical locations.

8.2.2 Personal protection equipment

Eye/face protection:
Recommendation: Eye glasses with side protection [EN 166]

Skin protection:
Recommendation: Protective gloves against mechanical risks [EN 388]

Respiratory protection:
Usually no personal respirative protection necessary. Take care of an adequate ventilation during application and curing. If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn. Combination filtering device [EN 14387], Filtering device (full mask or mouthpiece) with filter: A-P2
Other protection measures:
Wear anti-static footwear and clothing

8.2.3 Environmental exposure controls
No data available.

8.3 Additional information
No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
Physical state: solid (molded parts)  Colour: different, depending on coloration
Odour: almost odourless

Safety relevant basic data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>at</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting point</td>
<td>not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freezing point</td>
<td>not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>not applicable</td>
<td></td>
<td>Decomposition</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>&gt; 250 °C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>&gt; 400 °C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapour density</td>
<td>not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>≈ 1 g/cm³</td>
<td>20 °C</td>
<td></td>
</tr>
<tr>
<td>Bulk density</td>
<td>not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>insoluble</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Softening point</td>
<td>95 – 110 °C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Soluble in: Acetone, Methyl ethyl ketone (MEK), Dichloromethane</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9.2 Other information:
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
See section 10.3

10.2 Chemical stability
The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions
No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid
Keep away from heat. Decompostion takes place from temperatures above: approx. 250 °C

10.5 Incompatible materials
ester; Ketone; aromatic hydrocarbons; halogenated hydrocarbons; Oxidising agent, strong

10.6 Hazardous decomposition products
No known hazardous decomposition products.
In case of fire may be liberated: Pyrolysis products, toxic (Methyl methacrylate, n-Butyl acrylate and Styrene); carbon oxides (COx), Gases/vapours, irritant; Gases/vapours, toxic.

Further information
No data available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute oral toxicity:
Based on available data, the classification criteria are not met.

Acute dermal toxicity:
Based on available data, the classification criteria are not met.

Acute inhalation toxicity:
Based on available data, the classification criteria are not met.

Skin corrosion/irritation:
Based on available data, the classification criteria are not met.

Serious eye damage/irritation:
Based on available data, the classification criteria are not met. Particulates and dust: May cause eye irritation.
Respiratory or skin sensitisation:
Based on available data, the classification criteria are not met.
Particulates and dust: May cause sensitisation especially in sensitive humans.

Germ cell mutagenicity:
Based on available data, the classification criteria are not met.

Carcinogenicity:
Based on available data, the classification criteria are not met.

Reproductive toxicity:
Based on available data, the classification criteria are not met.

STOT-single exposure:
Based on available data, the classification criteria are not met.
Particulates and dust: May cause respiratory irritation.

STOT-repeated exposure:
Based on available data, the classification criteria are not met.

Aspiration hazard:
Based on available data, the classification criteria are not met.

Additional information:
No data available.

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity:
Based on available data, the classification criteria are not met.

12.2 Persistence and degradability
Biodegradation:
In accordance with the required stability the product is poorly biodegradable.

12.3 Bioaccumulative potential
Accumulation/Evaluation:
No indication of bioaccumulation potential.

12.4 Mobility in soil
No data available.

12.5 Results of PBT and vPvB assessment
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Other adverse effects
No data available.
SECTION 13: Disposal considerations

13.1 Waste treatment methods

13.1.1 Product/Packaging disposal
Waste codes/waste designations according to EWC

Waste code product:

- 17 02 03 plastic
- 20 03 07 bulky waste
- 07 02 13 Waste plastic
- 16 01 19 plastic
- 20 01 39 plastics

Waste treatment options

Appropriate disposal/Product:
Disposal according to applicable legislation. For waste disposal consult the local authorized waste disposal company.

Appropriate disposal/Package:
Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

Other disposal recommendations:
The allocation of waste code numbers/waste names must be carried out in accordance with the European Waste Catalogue (EWC). Collect in closed and suitable containers for disposal. Do not allow to enter into surface water or drains.

13.2 Additional information
Waste for disposal is to be classified and labelled.

SECTION 14: Transport information

No dangerous good in sense of these transport regulations.

14.1 UN-No.
not relevant

14.2 UN proper shipping name
not relevant

14.3 Transport hazard class(es)
not relevant

14.4 Packing group
not relevant
14.5 Environmental hazards
not relevant

14.6 Special precautions for user
not relevant

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code
not applicable

Additional information:
No data available.

SECTION 15: Regulatory information

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

15.1.1 EU legislation
Other EU regulations:
Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work Observe restrictions to employment for juvenis according to the „juvenile work protection guideline“ (94/33/EC).

15.1.2 National regulations
No data available.

15.2 Chemical Safety Assessment
Test not required.

15.3 Additional information
No data available.

SECTION 16: Other information

16.1 Indication of changes
No data available.

16.2 Abbreviations and acronyms
See overview table at www.euproc.eu

16.3 Key literature references and sources for data
ECHA, C&L Inventory: http://echa.europa.eu/information-on-chemicals/cl-inventory-database
ECHA, Registered substances: http://echa.europa.eu/information-on-chemicals/registered-substances
GESTIS (Gefahrstoffinformationssystem der DGUV): http://www.dguv.de/fra/GESTIS/index.jsp
Hörath Gefährliche Stoffe und Gemische, 8. Auflage, Dr. Angela Schulz
Safety data sheets of the manufacturers
16.4 Classification for mixtures and used evaluation method according to regulation (EC) No. 1272/2008 [CLP]

Classification according to Regulation (EC) No. 1272/2008 [CLP]:

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

16.5 Relevant H- and EUH-phrases

No data available.

16.6 Training advice

No data available.

16.7 Additional information

The information in this safety data sheet has been established to our best knowledge and was up-to-date at time of revision. The information is intended to give you advice about the safe handling of the product for storage, processing, transport and disposal. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.