SAFETY DATA SHEET
according to Regulation (EC) No 1907/2006 (REACH) as amended

Rosin

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

1.1. Product identifier
   Rosin
   Substance / mixture
   rosin; colophony

1.2. Relevant identified uses of the substance or mixture and uses advised against
   Substance's intended use
   Flux agent.
   Disapproved uses of substance
   The product should not be used in ways other then those referred in Section 1.

1.3. Details of the supplier of the safety data sheet
   AG TermoPasty Grzegorz Gąsowski
   Kolejowa 33 E, Sokoły, 18-218
   Poland
   Identification number (ID) 200133730
   VAT Reg No 9661767714
   Phone 862741342
   E-mail biuro@termopasty.pl
   Web address www.termopasty.pl

1.4. Emergency telephone number
   National Health Service (NHS) 111
   National poisoning information centre Scotland, NHS 24: 111

SECTION 2: Hazards identification

2.1. Substance or mixture classification
   Classification of the substance in accordance with Regulation (EC) No 1272/2008
   The substance is classified as dangerous.
   Skin Sens. 1, H317

   Full text of all classifications and hazard statements is given in the section 16.

   Most serious adverse effects on human health and the environment
   May cause an allergic skin reaction.

2.2. Label elements
   Hazard pictogram

   Signal word
   Warning

   Dangerous substance
   rosin; colophony (Index: 650-015-00-7; CAS: 8050-09-7)

   Hazard statements
   H317 May cause an allergic skin reaction.
Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves.
P302+P352 IF ON SKIN: Wash with plenty of water and soap.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P501 Dispose of contents/container to according to applicable regulations.

2.3. Other hazards
Substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.1. Substances
Chemical characterization
The substance specified below.

<table>
<thead>
<tr>
<th>Identification numbers</th>
<th>Substance name</th>
<th>Content in % weight</th>
<th>Classification according to Regulation (EC) No 1272/2008</th>
<th>Note.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index: 650-015-00-7</td>
<td>substance main component</td>
<td>100</td>
<td>Skin Sens. 1, H317</td>
<td></td>
</tr>
<tr>
<td>CAS: 8050-09-7</td>
<td>rosin; colophony</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC: 232-475-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures
Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

Inhalation
Terminate the exposure immediately; move the affected person to fresh air.

Skin contact
Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

Eye contact
Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes.

Ingestion
Rinse out the mouth with clean water. In the event of issues, find medical help.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation
Not expected.

Skin contact
May cause an allergic skin reaction.

Eye contact
Not expected.

Ingestion
Irritation, nausea.

4.3. Indication of any immediate medical attention and special treatment needed
Symptomatic treatment.
SAFETY DATA SHEET
according to Regulation (EC) No 1907/2006 (REACH) as amended

Rosin

SECTION 5: Firefighting measures

5.1.  Extinguishing media

Suitable extinguishing media
Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media
Water - full jet.

5.2.  Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3.  Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing. Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1.  Personal precautions, protective equipment and emergency procedures

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Prevent contact with skin and eyes.

6.2.  Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

6.3.  Methods and material for containment and cleaning up

Place the product mechanically in an appropriate manner. Dispose of the collected material according to the instructions in the section 13.

6.4.  Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1.  Precautions for safe handling

Prevent contact with skin and eyes. Contaminated work clothing should not be allowed out of the workplace. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

7.2.  Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose.

7.3.  Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1.  Control parameters

United Kingdom of Great Britain and Northern Ireland

<table>
<thead>
<tr>
<th>Substance name (component)</th>
<th>Type</th>
<th>Time of exposure</th>
<th>Value</th>
<th>Note</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>rosin; colophony (CAS: 8050-09-7)</td>
<td>WEL</td>
<td>8 hours</td>
<td>0,05 mg/m³</td>
<td>Capable of causing occupational asthma.</td>
<td>GBR</td>
</tr>
<tr>
<td></td>
<td>WEL</td>
<td>15 minutes</td>
<td>0,15 mg/m³</td>
<td>Capable of causing occupational asthma.</td>
<td>&quot;</td>
</tr>
</tbody>
</table>
### DNEL

<table>
<thead>
<tr>
<th>Workers / consumers</th>
<th>Route of exposure</th>
<th>Value</th>
<th>Effect</th>
<th>Determining method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers</td>
<td>Dermal</td>
<td>25 mg/kg bw/day</td>
<td>Systemic chronic effects</td>
<td></td>
</tr>
<tr>
<td>Workers</td>
<td>Inhalation</td>
<td>176.32 mg/m³</td>
<td>Systemic chronic effects</td>
<td></td>
</tr>
<tr>
<td>Consumers</td>
<td>Oral</td>
<td>15 mg/kg bw/day</td>
<td>Systemic chronic effects</td>
<td></td>
</tr>
<tr>
<td>Consumers</td>
<td>Dermal</td>
<td>15 mg/kg bw/day</td>
<td>Systemic chronic effects</td>
<td></td>
</tr>
<tr>
<td>Consumers</td>
<td>Inhalation</td>
<td>52.174 mg/m³</td>
<td>Systemic chronic effects</td>
<td></td>
</tr>
</tbody>
</table>

### PNEC

<table>
<thead>
<tr>
<th>Route of exposure</th>
<th>Value</th>
<th>Determining method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking water</td>
<td>0.005 mg/l</td>
<td></td>
</tr>
<tr>
<td>Seawater</td>
<td>0.0005 mg/l</td>
<td></td>
</tr>
<tr>
<td>Freshwater sediment</td>
<td>108 mg/kg of dry substance</td>
<td></td>
</tr>
<tr>
<td>Sea sediments</td>
<td>10.8 mg/kg of dry substance</td>
<td></td>
</tr>
<tr>
<td>Soil (agricultural)</td>
<td>21.4 mg/kg of dry substance</td>
<td></td>
</tr>
<tr>
<td>Microorganisms in wastewater treatment plants</td>
<td>1000 mg/l</td>
<td></td>
</tr>
</tbody>
</table>

### 8.2. Exposure controls

Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

**Eye/face protection**

It is not needed.

**Skin protection**

Hand protection: Protective gloves resistant to the product. Contaminated skin should be washed thoroughly.

**Respiratory protection**

It is not needed.

**Thermal hazard**

Not available.

**Environmental exposure controls**

Observe usual measures for protection of the environment, see Section 6.2.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

**Appearance**

- Physical state: solid at 20°C
- Color: yellow
- Odour: specific
- Odour threshold: data not available
- pH: data not available
- Melting point/freezing point: 66.5-93.4 °C
- Initial boiling point and boiling range: data not available
- Flash point: >200 °C
- Evaporation rate: data not available
- Flammability (solid, gas): The product is non-flammable.
- Upper/lower flammability or explosive limits
  - flammability limits: data not available
  - explosive limits: data not available
- Vapour pressure: 400 Pa at 124.5 °C
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**Rosin**

<table>
<thead>
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</tr>
</tbody>
</table>

Vapour density: data not available
Relative density: data not available
Solubility(ies):
- solubility in water: soluble
- solubility in fats: data not available
Partition coefficient: n-octanol/water: 3.0-6.2
Auto-ignition temperature: data not available
Decomposition temperature: 200 °C
Viscosity: data not available
Explosive properties: data not available
Oxidising properties: data not available

**9.2. Other information**
Density: data not available
Ignition temperature: data not available

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**
The substance is non-flammable.

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

**10.3. Possibility of hazardous reactions**
Unknown.

**10.4. Conditions to avoid**
The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

**10.5. Incompatible materials**
Protect against strong acids, bases and oxidizing agents.

**10.6. Hazardous decomposition products**
Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**
No toxicological data is available for the substance.

**Acute toxicity**
Based on available data the classification criteria are not met.

<table>
<thead>
<tr>
<th>Route of exposure</th>
<th>Parameter</th>
<th>Value</th>
<th>Time of exposure</th>
<th>Species</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>LD₅₀</td>
<td>2800 mg/kg</td>
<td></td>
<td>Rat (Rattus norvegicus)</td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>LD₅₀</td>
<td>&gt;1000-&lt;2000 mg/kg</td>
<td></td>
<td>Guinea-pig (Cavia aperea f. porcellus)</td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>LD₅₀</td>
<td>&gt;2000 mg/kg</td>
<td></td>
<td>Rat (Rattus norvegicus)</td>
<td></td>
</tr>
</tbody>
</table>

**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.
SAFETY DATA SHEET
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**Respiratory or skin sensitisation**
May cause an allergic skin reaction. Based on available data the classification criteria are not met.

**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.

**Toxicity for specific target organ - single exposure**
Based on available data the classification criteria are not met.

**Toxicity for specific target organ - repeated exposure**
Based on available data the classification criteria are not met.

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

**SECTION 12: Ecological information**

12.1. **Toxicity**

**Acute toxicity**
Based on available data the classification criteria are not met.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Method</th>
<th>Value</th>
<th>Time of exposure</th>
<th>Species</th>
<th>Environment</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC₅₀</td>
<td>OECD 203</td>
<td>60.3 mg/l</td>
<td>96 hour</td>
<td>Branchydanio rerio</td>
<td></td>
<td>Scheerbaum D</td>
</tr>
</tbody>
</table>

12.2. **Persistence and degradability**
Not available.

12.3. **Bioaccumulative potential**
Not available.

12.4. **Mobility in soil**
Not available.

12.5. **Results of PBT and vPvB assessment**
Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. **Other adverse effects**
Not available.

**SECTION 13: Disposal considerations**

13.1. **Waste treatment methods**
Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.
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Legislation of waste

SECTION 14: Transport information
14.1. UN number
Not subject to ADR.

14.2. UN proper shipping name
not available

14.3. Transport hazard class(es)
not available

14.4. Packing group
not available

14.5. Environmental hazards
not available

14.6. Special precautions for user
Reference in the Sections 4 to 8.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
not available

SECTION 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2. Chemical safety assessment
not available

SECTION 16: Other information
A list of standard risk phrases used in the safety data sheet
H317 May cause an allergic skin reaction.

Guidelines for safe handling used in the safety data sheet
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P501 Dispose of contents/container to according to applicable regulations.
P272 Contaminated work clothing should not be allowed out of the workplace.
P302+P352 IF ON SKIN: Wash with plenty of water and soap.
P363 Wash contaminated clothing before reuse.

Other important information about human health protection
The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet
ADR European agreement concerning the international carriage of dangerous goods by road
BCF Bioconcentration Factor
CAS Chemical Abstracts Service
**SAFETY DATA SHEET**

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**CLP**  
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures

**DNEL**  
Derived no-effect level

**EC**  
Identification code for each substance listed in EINECS

**EC₅₀**  
Concentration of a substance when it is affected 50% of the population

**EINECS**  
European Inventory of Existing Commercial Chemical Substances

**EmS**  
Emergency plan

**EU**  
European Union

**IATA**  
International Air Transport Association

**IBC**  
International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals

**ICₕ₀**  
Concentration causing 50% blockade

**ICAO**  
International Civil Aviation Organization

**IMDG**  
International Maritime Dangerous Goods

**INCI**  
International Nomenclature of Cosmetic Ingredients

**ISO**  
International Organization for Standardization

**IUPAC**  
International Union of Pure and Applied Chemistry

**LCₕ₀**  
Lethal concentration of a substance in which it can be expected death of 50% of the population

**LDₕ₀**  
Lethal dose of a substance in which it can be expected death of 50% of the population

**LOAEC**  
Lowest observed adverse effect concentration

**LOAEL**  
Lowest observed adverse effect level

**log Kow**  
Octanol-water partition coefficient

**MARPOL**  
International Convention for the Prevention of Pollution From Ships

**NOAEC**  
No observed adverse effect concentration

**NOAEL**  
No observed adverse effect level

**NOEC**  
No observed effect concentration

**NOEL**  
No observed effect level

**OEL**  
Occupational Exposure Limits

**PBT**  
Persistent, Bioaccumulative and Toxic

**PNEC**  
Predicted no-effect concentration

**ppm**  
Parts per million

**REACH**  
Registration, Evaluation, Authorisation and Restriction of Chemicals

**RID**  
Agreement on the transport of dangerous goods by rail

**UN**  
Four-figure identification number of the substance or article taken from the UN Model Regulations

**UVCB**  
Substances of unknown or variable composition, complex reaction products or biological materials

**VOC**  
Volatile organic compounds

**vPvB**  
Very Persistent and very Bioaccumulative

---

**Skin Sens.**  
Skin sensitization

**Training guidelines**

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

**Recommended restrictions of use**

Not available

**Information about data sources used to compile the Safety Data Sheet**


**The changes (which information has been added, deleted or modified)**

General update
SAFETY DATA SHEET
according to Regulation (EC) No 1907/2006 (REACH) as amended

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</tr>
</tbody>
</table>

**Statement**

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.