SAFETY DATA SHEET

According to the Committee's Regulation (EU) 1272/2008

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

1.1 Product identifier:

Trade name **GUM ROSIN**

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

Relevant identified uses -

Uses advised against **-**

1.3. Details of the supplier of the safety data sheet

Zakłady Chemiczne „ANSER" Sp. z o.o.
ul. J. Conrada 7, 01-922 Warszawa
ph.: +48 22 663 70 73, fax: +48 22 669 01 22

E-mail address of the person responsible for the safety data sheet: reach@anser.pl

1.4. Emergency telephone number:

112 (24h)

SECTION 2: Hazards identification

2.1. Classification of the mixture

The mixture is classified as hazardous according to the Regulation of the European Council 1272/2008: Skin Sens. 1; H317.

Harmful effects for human health

May cause an allergic skin reaction.

Harmful effects for the environment

Unknown.

Harmful effects related to physical-and-chemical properties

Unknown.

2.2. Elements of labelling

Warning symbols and signs:

Warning

Expressions indicating the type of hazard (H):

H317 – May cause an allergic skin reaction.

Expressions indicating safety measures (P):

P102 - Keep out of reach of children.

P261 - Avoid breathing dust/fumes/gas/mist/vapours/spray.

P302+P352 - IF ON SKIN: Wash with plenty of water.

P333+P313 - If skin irritation or a rash occurs: Get medical advice/attention.

2.3. Other hazards

The substances contained in the mixture do not meet the criteria PBT and vPvB pursuant to schedule XIII of the REACH Directive.

SECTION 3: Composition/information on ingredients

Name	Content % mass	Identifying numbers of substances	Classification acc. to Regulation (EC) 1272/2008
Colophony	100	CAS: 8050-09-7 WE: 232-475-7, Index number: 650-015-00-7	Skin Sens. 1; H317

The full wording of expressions describing hazard is given in sec. 16.

SECTION 4: First aid measures.

4.1. Description of first aid measures

In case of exposure via respiratory tract

- Leave exposure area (or take the injured out of the exposure area).
- Assure peace and quite to the injured as well as access to fresh air.
- In case of breath arrest, give artificial respiration.
- In case of stifling, give oxygen.

- Assure medical assistance.

In case of exposure through contact with the skin

- In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes
- Cover the irritated skin with an emollient.
- Wash clothing before reuse.
- Thoroughly clean shoes before reuse
- Get medical attention

In case of exposure through contact with the eyes

- Remove contact lenses.
- Wash with plenty of cool water for about 15 minutes with the lids open (avoid strong water stream due to the risk of damaging the cornea mechanically)
- Consultation with an oculist is necessary if an irritation occurs.

In case of exposure via alimentary tract

- Do not provoke vomiting.
- Never give anything by mouth to an unconscious person.
- If large quantities of this material are swallowed, call a physician immediately.

4.2. The most important acute and delayed symptoms and effects of exposure

Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation.

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

Decision as to the rescue procedure shall be taken by the doctor after careful examination of the condition of the injured.

SECTION 5: Fire-fighting measures.

Proceed in line with the Fire Safety Instruction, if the recipient does not have one, the persons on the site shall be notified about the failure. All persons not participating in repairing the failure shall be removed from the area at risk. Evacuation shall be ordered if needed. Minor fires shall be put out with extinguishers on hand, in case of major fires, State Fire Service and the Police shall be notified.

5.1. Extinguishing media

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

5.2. Special risks related to the mixture

May be combustible at high temperature. Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks. Risks of explosion of the product in presence of mechanical impact: Not available. Thermal decomposition products include formaldehyde,acetone, methanol, aldehydes,

carbon dioxide, carbon monoxide, methane, ethane, and acids. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

5.3. Information for the fire services

The use of full protective clothing outfit and breathing apparatuses with independent oxygen inlet is recommended.

SECTION 6: Proceeding in the event of accidental release to the environment

6.1. Personal precautions, protective equipment and emergency procedures

For persons not belonging to the personnel giving assistance

Limit access of outsiders to the emergency area until appropriate cleaning procedures have been completed. Do not inhale vapours. Avoid contact with the skin and eyes. Use personal protection means.

For persons giving assistance

Remove ignition sources. Use protective gloves and clothing in case of prolonged exposure and major leakage.

6.2. Precautions related to environment protection

Do not let the product get to the sewage system, ground or surface waters.

6.3. Methods and materials preventing the spread of contamination and aimed at removing contamination

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by

spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

6.4. References to other sections

Personal protection means – section 8.

Waste shall be removed in line with the binding law provisions – section 13.

SECTION 7: Mixture handling and storage

7.1. Precautions for safe handling

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not breathe dust. Keep away from incompatibles such as oxidizing agents.

7.2. Conditions of safe storage including information on any mutual nonconformities

Keep container tightly closed. Keep container in a cool, well-ventilated area.

Additional information in section 10.

7.3. Specific end uses

None.

SECTION 8: Exposure controls/personal protection means

8.1. Control parameters

Exposure Limits:

Rosin Core Solder Pyroloysis Products:

TWA: 0.1 (mg/m3) (as formaldehyde) from ACGIH (TLV) [United States]

Gum Rosin (solid):

TWA: 10 (mg/m3)

Consult local authorities for acceptable exposure limits.

8.2. Exposure control

Applied technical protection measures

Information provided in section 7.

Personal protection measures:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

SECTION 9. Physical and chemical properties.

9.1. Information about general physical and chemical properties

- Form — Yellow solid
- Odour — Not available.
- pH — Not available.
- Melting/solidification point — 70^0C
- Boiling temperature — Not available.
- Flash point — Not available.

• Evaporation rate	Not available.
• Flammability (of solid substance, gas)	Not available.
• Lower explosive/combustion limit	Not available.
• Upper explosive/combustion limit	Not available.
• Vapour pressure	Not available.
• Vapour density	Not available.
• Specific Gravity	1.06 - 1.08 @ 25 deg. C (Water = 1)
• Solubility	not soluble in water, dissolves in organic solvents
• Partition coefficient: n-octanol/water	no data
• Self-ignition temperature	Not available.
• Decomposition temperature	no data
• Viscosity	no data
• Explosive properties	no data
• Oxidizing properties	no data

9.2. Other information

No data.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is not reactive under normal conditions.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Unknown.

10.4. Conditions to avoid

High temperature.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

Do not occur under normal conditions.

SECTION 11: Toxicological information.

11.1. Information on toxicological effects

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals:

LD50: Not available.

LC50: Not available.

Chronic Effects on Humans: May cause damage to the following organs: lungs, skin.

Other Toxic Effects on Humans:

Hazardous in case of of ingestion.

Slightly hazardous in case of skin contact (irritant), of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects:

Rosin has two types of hazards - from the rosin itself, and from the thermal decomposition products. The thermal decomposition products (aka Rosin Core Solder Pyrolysis

Products) include formaldehyde, acetone, methanol, aldehydes, carbon dioxide, carbon monoxide, methane, ethane, and acids. The handling of the rosin in the solid state is expected to be a low hazard. It may cause skin, eyes, and respiratory tract irritation. Ingestion may cause digestion tract irritation. The thermal decomposition products of Rosin (Rosin core solder pyrolysis products) can be irritating to the eyes, nose, throat in acute exposure.

Chronic Potential Health Effects:

Skin: Repeated or prolonged skin contact with the rosin itself can cause contact dermatitis, an allergic reaction. It can also cause eczema.

Inhalation: Repeated or prolonged inhalation of the rosin dust or smoke can cause asthma, an allergic reaction. Rosin core solder pyrolysis products can be sensitizing, and exposures should be reduced to as low as possible.

SECTION 12: Ecological information.

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: Not available.

Special Remarks on the Products of Biodegradation: Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

If possible, waste shall be recovered.

Do not allow the contamination of surface and ground waters. In line with the law regulation in force in Poland, waste may be collected, neutralized, recovered or recycled only by authorised companies, and it may be given only to such companies. In case of doubt, waste disposal procedures shall be discussed and agreed with the local Environment Protection Inspection unit.

Removal of mixture: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

The following law regulations shall be observed:
The Act of 27 April 2001 on waste (Journal of Laws of 2001 no 62 item 628 as amended).
The Environment Minister Regulation of 27 September 2001 on waste catalogue (Journal of Laws of 2001 no 112, item 1206).
The Act of 11 May 2001 on packaging and packaging waste (Journal of Laws of 2001 no 63, item 638 as amended).

SECTION 14: Transport information

This product is subject to regulations on the transport of dangerous goods by road.
Transport by road:

14.1. UN Number	-
14.2. Proper UN transport name	-
14.3. Hazard class in transport	-
14.4. Packaging group	-
14.5. Environmental risk	unknown
14.6. Special precautions	-
14.7. Bulk transport pursuant to schedule II to the convention MARPOL 73/78 and IBC code	no data

SECTION 15: Regulatory information.

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

The Regulation of the Minister of Health of 21 December 2005 on essential requirements for individual protection measures (Journal of Laws of 2005 No. 259, item 2173).
The Act of 25 February 2011 on chemical substances and their mixtures (Journal of Laws of 2011 no. 63
item 322).
The Regulation of the Minister of Health of 20 April 2012 on labelling containers with hazardous substances, preparations and some chemical preparations (Journal of Laws of 2012 No. 0 item 445).
Directive 1999/45/EC of the European Parliament and Council of 31 May 1999 on harmonising the regulatory, executive and administrative provisions of Member States relating to the classification, labelling and packaging of hazardous substances and mixtures.

Regulation (EC) No 1907/2006 of the European Parliament and Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
Regulation of the European Parliament and Council (EC) no. 1272/2008 of 16 December 2008 on the classification, labelling and packaging of hazardous substances and mixtures amending and repealing directives 67/548/EEC and 1999/45/EC and amending the directive (EC) no. 1907/2006 (Official Journal EU series L 353 of 31 December 2008 as amended).
Directive of the Committee (EC) no. 790/2009 of 10 August 2009 adjusting the Directive of the European Parliament and Council (EC) no. 1272/2008 of 16 December 2008 on the classification, labelling and packaging of substances and mixtures, to the technical-and-scientific progress.
Regulation of the Committee (EC) no. 453/2010 of 20 May 2010 amending the regulation No. 1907/2006 of the European Parliament and Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
European agreement on international transport of dangerous goods by road ADR (in force since January 1, 2005) (Journal of Laws of 2005, No. 178, item 1481).
The Act of 19 August 2011 on transport of dangerous goods by road (Journal of Laws of 2011 no. 227, item 1367 as amended).
The Act of April 16, 2004 on building products (Journal of Laws of 2004 No 92 item 881).
The Regulation of the Infrastructure Minister of August 11, 2004 on the systems of conformity assessment and requirements which notified units participating in conformity assessment should meet and the method of marking building products with the CE mark products (Journal of Laws of 2004 No 195 item 2011).
The Regulation of the Minister of Health of June 11, 2012 on the categories of hazardous substances and mixtures, whose packaging shall be equipped with locks preventing children from opening it and warning information sensed by touch (Journal of Laws of 2005 No. 0, item 688).

15.2. Chemical safety assessment

The producer of the mixture did not provide the evaluation of chemical safety.

SECTION 16: Other information.

Updates

Sections: 1, 8, 15.

The explanation of abbreviations and acronyms used in the safety data sheet

PBT – Persistent, Bio-accumulative, Toxic.
vPvB – very Persistent and very Bio-accumulative.
Skin Sens. 1 – Allergic to the skin.
H317 - May cause allergenic effect of the skin.
NDS – Highest allowed concentration.
NDSCh – Highest allowed momentary concentration.
NDSP – Highest allowed cap concentration.

DN(M)EL – Level not causing changes.
DSB – Allowed concentration in biological material.
PNEC – Predicted concentration not causing effect.
LD50 - Lethal Dose 50% when you observe the death of 50% of the animals tested.
LC50 - Lethal Concentration 50% when you observe the death of 50% of the animals tested.
EC50 - Concentration at which you observe 50% decrease of growth or its tempo.
NOEL – The level at which you do not observe any harmful changes.
LOEC – The lowest concentration causing a noticeable result.
NOEC – The highest concentration of the substance at which you do not observe any adverse effects.
UVCB – Substances of unknown or altered composition, complex reaction products or biological materials.
OECD – Organisation of Economic Cooperation and Development.
BCF –Bio-concentration
Kd – Dispersion coefficient.

References to key literature and sources

Safety data sheet of the mixture's ingredients. Data base of the European Commission Joint Research Centre.
Legal regulations.

Recommendations with regard to employee trainings

Prior to commencement of work, the employee shall be trained from within the scope of Work Safety and Hygiene regarding the handling of chemicals and appropriate on the job training. Persons dealing with the transport of hazardous substances shall receive Work Safety and Hygiene training as well as the general on the job training.