

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

SAFETY DATA SHEET

SN96 AG4 RECT 28.75x23.5X0.25 MM RS7MI (1.0-2.0%)I

FOR REGULATORY AND SDS QUESTIONS (EUROPE)

CALL THE PRODUCT STEWARDSHIP LINE

(ENGLISH SPEAKING ONLY)

+1-908-791-2336 (15:00 - 21:00 CET; MONDAY-FRIDAY)

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

1.1 Product identifier

Product name : SN96 AG4 RECT 28.75x23.5X0.25 MM RS7MI (1.0-2.0%)I

Product code : 241311

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

Identified uses

soldering

Industrial applications.

1.3 Details of the supplier of the safety data sheet

e-mail address of person responsible for this SDS

: Europeanregulatory@macdermid.com

responsible for this SDS Supplier

: Fernox UK Ltd

2 Genesis Business Park

Albert Drive

Sheerwater, Surrey Woking GU21 5RW

Information contact

: Contact info: Tel: +44 (0) 330 100 7750 e-mail: salesEU@AlphaAssembly.com

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number :

Supplier

Telephone number : Carechem24: (+44) 1865 407333; (+44) 1235 239 670 (across Europe)

Hours of operation : 24/7

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK CLP/GHS

Not classified.

The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention :
Response :
Storage :
Disposal :

Supplemental label: EUH208 - Contains rosin. May produce an allergic reaction.

elements EUH210 - Safety data sheet available on request.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Special packaging requirements

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a

vPvB.

Other hazards which do not result in classification

: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % | Classification | Туре |
|-------------------------|--|-----|---|---------|
| tin | REACH #: 01-2119486474-28 EC: 231-141-8 CAS: 7440-31-5 | ≥90 | Not classified. | [2] |
| silver | REACH #: 01-2119555669-21 EC: 231-131-3 CAS: 7440-22-4 | ≤5 | Not classified. | [2] |
| rosin | REACH #: 01-2119480418-32 EC: 232-475-7 CAS: 8050-09-7 Index: 650-015-00-7 | <1 | Skin Sens. 1, H317 | [1] [2] |
| | | | See Section 16 for the full text of the H statements declared above. | |

SECTION 3: Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower Eye contact

eyelids. Check for and remove any contact lenses. Get medical attention if irritation

occurs.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Get medical attention if symptoms occur.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and

shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed

> person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : No specific data. Inhalation : No specific data. Skin contact : No specific data. Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

: None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : No specific fire or explosion hazard.

Hazardous combustion

products

: Decomposition products may include the following materials:

metal oxide/oxides

5.3 Advice for firefighters

Special protective actions

for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without

suitable training.

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SECTION 5: Firefighting measures

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

For emergency responders

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Small spill

: Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures

Advice on general occupational hygiene

: Put on appropriate personal protective equipment (see Section 8).

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|-------------------------|--|
| tin | EH40/2005 WELs (United Kingdom (UK), 2002). |
| | TWA: 2 mg/m³ 8 hours. |
| | STEL: 4 mg/m³ 15 minutes. |
| silver | EH40/2005 WELs (United Kingdom (UK), 1/2020). |
| | TWA: 0.1 mg/m ³ 8 hours. |
| rosin | EH40/2005 WELs (United Kingdom (UK), 1/2020). Inhalation |
| | sensitiser. |
| | STEL: 0.15 mg/m ³ 15 minutes. Form: Fume |
| | TWA: 0.05 mg/m ³ 8 hours. Form: Fume |

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

EU DNELs/DMELs

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|-------------------------|------|-------------------------|-------------------------|--------------------|----------|
| tin | DNEL | Long term Oral | 5 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 10 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 17 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 71 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 80 mg/kg bw/day | General population | Systemic |
| silver | DNEL | Long term Inhalation | 0.04 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 0.1 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Oral | 1.2 mg/kg bw/day | General population | Systemic |
| rosin | DNEL | Long term Oral | 1.0655 mg/ kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 1.0655 mg/ kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 2.131 mg/ kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 10 mg/m³ | Workers | Local |

EU PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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SECTION 8: Exposure controls/personal protection

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. Recommended: safety glasses with side-shields

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. < 1 hour (breakthrough time): disposable vinyl

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: overall

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state

Colour : Silvery.

Odour : Not available.

Odour threshold : Not available.

Melting point/freezing point : 221 to 222°C

Initial boiling point and : Not available.

boiling range

Flammability (solid, gas)
Upper/lower flammability or

explosive limits

Not available.Not available.

Flash point : [Product does not sustain combustion.]

: Solid.

Auto-ignition temperature: Not applicable.Decomposition temperature: Not available.pH: Not available.Viscosity: Not available.

Solubility(ies) :

| Media | Result |
|------------|-------------|
| cold water | Not soluble |
| hot water | Not soluble |

Partition coefficient: n-octanol/ : Not available.

water

Vapour pressure

Relative density

: Not available. : Not available.

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SECTION 9: Physical and chemical properties

Density : 5.9 g/cm³ [20°C (68°F)]

Vapour density: Not available.Explosive properties: Not available.Oxidising properties: Not available.

Particle characteristics

Median particle size : Not relevant/applicable due to nature of the product.

9.2 Other information

SECTION 10: Stability and reactivity

10.1 Reactivity : Not available.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : No specific data.

10.6 Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|-----------|---------|------------|----------|
| rosin | LD50 Oral | Rat | 7600 mg/kg | - |

Conclusion/Summary: Not available.

Acute toxicity estimates

| Product/ingredient name | Oral (mg/ kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | (vapours) | Inhalation (dusts and mists) (mg/l) |
|-------------------------|------------------|-------------------|--------------------------------|-----------|--|
| rosin | 7600 | N/A | N/A | N/A | N/A |

Irritation/Corrosion

Conclusion/Summary : Not available.

Sensitisation

Conclusion/Summary: Not available.

Mutagenicity

Conclusion/Summary: Not available.

Carcinogenicity

Conclusion/Summary: Not available.

Reproductive toxicity

Conclusion/Summary: Not available.

Teratogenicity

Conclusion/Summary: Not available.

Specific target organ toxicity (single exposure)

SECTION 11: Toxicological information

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes : Not available.

of exposure

Potential acute health effects

Eye contact : No known significant effects or critical hazards. Inhalation : No known significant effects or critical hazards. **Skin contact** : No known significant effects or critical hazards. Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data. Inhalation : No specific data. **Skin contact** : No specific data. Ingestion : No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate

effects

: Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : No known significant effects or critical hazards. Carcinogenicity : No known significant effects or critical hazards. Mutagenicity : No known significant effects or critical hazards. Reproductive toxicity : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|----------------------------------|---|----------|
| silver | Acute LC50 4500 ppb Fresh water | Crustaceans - Scud - Gammarus pseudolimnaeus | 48 hours |
| | Acute LC50 0.24 μg/l Fresh water | Daphnia - Water flea - Daphnia magna | 48 hours |
| | Chronic NOEC 5 mg/l Marine water | Algae - Dinoflagellate - Glenodinium halli | 72 hours |

Conclusion/Summary : Not available.

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SECTION 12: Ecological information

12.2 Persistence and degradability

Conclusion/Summary: Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| rosin | - | - | Readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|------------|-----|-----------|
| silver | - | 70 | low |
| rosin | 1.9 to 7.7 | - | high |

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects: No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste

Waste catalogue

Yes.

| Waste code | Waste designation |
|------------|--|
| 10 08 11 | dross and skimmings other than those mentioned in 10 08 10 |

Packaging

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions

: This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

| | ADR/RID | IMDG | IATA |
|----------------------------------|----------------|----------------|----------------|
| 14.1 UN number | Not regulated. | Not regulated. | Not regulated. |
| 14.2 UN proper shipping name | - | - | - |
| 14.3 Transport hazard class(es) | - | - | - |
| 14.4 Packing group | - | - | - |
| 14.5 Environmental hazards | No. | No. | No. |

Additional information

IATA

: The environmentally hazardous substance mark may appear if required by other transportation regulations.

user

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in

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the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments

: Not applicable - not transported in bulk

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture UK (GB) /REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

: Not applicable.

EU regulations

Industrial emissions (integrated pollution

: Listed

Air

Industrial emissions (integrated pollution prevention and control) -

prevention and control) -

: Listed

Water

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SECTION 15: Regulatory information

15.2 Chemical safety assessment

 This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate

GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and

Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019

No. 720 and amendments

DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level

EUH statement = GB CLP-specific Hazard statement

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Not classified.

Full text of abbreviated H statements

H317 May cause an allergic skin reaction.

Full text of classifications

Skin Sens. 1 SKIN SENSITISATION - Category 1

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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

MacDermid Alpha SDS CLP Europe