



ROSIN

SAFETY DATA SHEET according to Regulation (EC)

No.1907/2006

Date 01.08.2020 Version 1.0

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

1.1 Product identifier

Product name: Colophony Rosin

1.2 Relevant identified uses of the substance or mixture and us advised against Identified uses: Printmaking, Climbing, Soldering

1.3 Details of the supplier of the safety data sheet:

Intaglio Printmaker Ltd
9 Playhouse Court
62 Southwark Bridge Road
London
SE10AT
info@intaglioprintmaker.com
02079282633

1.4 Emergency telephone number:

Please contact the regional Health Center in your country.
In case of a medical emergency following exposure to a chemical, the public should call NHS Direct in England or Wales 0845 46 47 or NHS 24 in Scotland 08454 24 24 24 (UK only).

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

According to 1272/2008/EC Regulation
Skin sensitizer Category 1

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms:



Signal word:

Warning

Hazard statements:

H317- May cause an allergic skin reaction

Precautionary statements:

P210- Keep away from heat/sparks/open flames/hot surfaces. No smoking

P261- Avoid breathing dust/fume

P280- Wear protective gloves/protective clothing

P302+P352- If on skin: wash with plenty of soap and water.

P333+P313- If skin irritation or rash occurs: get medical advice/attention

P363- Wash contaminated clothing before reuse

P501- Dispose contents/container according to the end user disposal procedure

According to 67/548/EC Regulation

Xi- Irritant Risk Phrase

Safety Phrases:

S 24- Avoid contact with skin

S 37- Wear suitable gloves

2.3 Other hazardsNone known.

SECTION 3. Composition/information on ingredients

3.1 Chemical Characterization

natural pine rosin

CAS: 8050-09-7

EC: 232-475-7

Index: 650-015-7

3.2 Description

aqueous developable dry film resist

3.3 Hazardous components

Rosin ATP CLP00 Concentration 100%

SECTION 4. First aid measures

4.1 Description of first aid measures

Product in eyes

Immediately flood eyes with plenty of low pressure water for at least 10 minutes, holding eye open. Remove contact lenses. Obtain medical assistance if redness develops or persists.

Product on skin

Wash skin thoroughly with soap and water. Obtain medical help if redness develops.

Hot product on skin

Small splashes should be cooled with cold water. When cold, the burn area should then be treated and when this process is complete the solid resin can be removed.

Where larger splashes are encountered, cool the skin with water and seek medical help.

Product ingested

Wash out mouth with water. Do not induce vomiting. Obtain medical attention if a large amount has been swallowed.

Product inhaled

Remove from exposure, keep warm and at rest. Obtain medical attention if breathing difficulty occurs.

4.2 Most important symptoms and effects, both acute and delayed

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide, dry chemical or water fog

Unsuitable extinguishing media

Water

5.2 Special hazards arising from the substance or mixture

Protective equipment

Self-contained breathing apparatus needed for fires in enclosed areas

Other information

Rosin dust is a severe explosion hazard in air; avoid dispersing dust in air. Minimum exposable concentration: 15g/m³. Risk of spark ignition prevented by reducing oxygen concentration below 17% by dilution with carbon dioxide.

5.3 Advice for firefighters

Wear protective eye wear, gloves and clothing.

Refer to Section 8.

5.4 Additional information:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols.

Avoid contact with skin, eyes and clothing.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing dust. Wear a dust respirator, gloves, chemical goggles and overalls.

6.2 Environmental precautions

Sweep up or otherwise recover the product and remove to a safe environment

6.3 Methods and materials for containment and cleaning up

Wear protective eye wear, gloves and clothing.

6.4 Reference to other sections

None

SECTION 7. Handling and storage

7.1 Precautions for safe handling

Do not eat, drink, smoke or use personal products when handling chemical substances.

Avoid breathing mist or vapor.

Personal protection

Wear protective clothing and dust mask

Dust

Avoid processes that generate excessive dust

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated area.

Storage conditions

Tightly closed. Dry.

Recommended storage temperature: under 20 degree Celsius.

Explosion proof ventilation adequate to meet any dust conditions at room temperature. Store in cool, well ventilated conditions.

Explosion proof electrical services should be used where dusty conditions prevail.

Prevent static sparks.

Product can spontaneously heat during storage- exercise care.

Avoid placing this material next to, or in contact with,
oxidising agents.

7.3 Specific end use(s)

no

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

Nuisance dust: Inhalable dust 10mg/m³ Respirable dust:

4mg/m³

DNEL workers

Acute / short-term exposure - systemic effects

Dermal DN(M)EL No-threshold effect and/or no dose-response
information available

Inhalation DN(M)EL No-threshold effect and/or no dose-response
information available

Acute / short-term exposure - local effects

Dermal DN(M)EL No-threshold effect and/or no dose-response
information available

Long-term exposure - systemic effects

Dermal DN(M)EL DNEL (Derived No Effect Level) = 17 mg/kg
bw/day

Inhalation DN(M)EL DNEL (Derived No Effect Level) = 117 mg/m³

Long-term exposure - local effects

Dermal DN(M)EL No-threshold effect and/or no dose-response
information available

Inhalation DN(M)EL No-threshold effect and/or no dose-response
information available

General population

Acute / short-term exposure - systemic effects

Dermal DN(M)EL No-threshold effect and/or no dose-response
information available

Inhalation DN(M)EL No-threshold effect and/or no dose-response
information available

Oral DN(M)EL No-threshold effect and/or no dose-response information available

Acute / short-term exposure - local effects

Dermal DN(M)EL No-threshold effect and/or no dose-response information available

Inhalation DN(M)EL No-threshold effect and/or no dose-response information available

Long-term exposure - systemic effects

Dermal DN(M)EL DNEL (Derived No Effect Level) = 10mg/kg bw/day

Inhalation DN(M)EL DNEL (Derived No Effect Level) = 35 mg/m³

Oral DN(M)EL DNEL (Derived No Effect Level) = 10 mg/kg bw/day

Long-term exposure - local effects

Dermal DN(M)EL No-threshold effect and/or no dose-response information available

Inhalation DN(M)EL No-threshold effect and/or no dose-response information available

Components to control with biological restricted values:

PNEC

Freshwater 0,0016 mg/L

Freshwater sediments 0,007 mg/kg sediment dw

Marine water 0,00016 mg/L

Marine sediments 0,0007 mg/kg sediment dw

Oral No bioaccumulation potential

STP 1000 mg/L

Soil 0,0045 mg/kg soil dw

8.2 Exposure controls

Appropriate engineering controls:

Personal protection equipment

Respiratory protection: Wear respiratory protection against organic vapours.

Hand protection: Wear appropriate gloves to prevent skin exposure.

Eye/face protection: Wear chemical splash goggles conforming to EN 166.

Skin protection: Wear appropriate clothing to prevent skin exposure.

Environmental exposure control:

Organizational measures Apply general preventive measures in chemical safe handling.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance Water-white to dark brown vitreous solid and powder

Odour Characteristic (slight turpentine odour)

pH - N/A

Melting Point/(Ring & Ball) 65 - 90°C

Flash Point >205°C

Auto ignition temperature >390°C

Explosive Properties Severe dust explosion hazard in air

Oxidising Properties None

Vapour Pressure <0.1hPa

Solubility- Water ~1.09

Solubility- Solvent Insoluble

Other Properties Aromatic hydrocarbons, chlorinated hydrocarbons, alcohols, ketones. Unsaponifiable matter 8% max

SECTION 10. Stability and reactivity

10.1 Reactivity

Does not react under normal conditions of use and storage.

10.2 Chemical stability

sStable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions

one under normal conditions of use and storage.

10.4 Conditions to avoid

Generation of dust in air

10.5 Incompatible materials

Oxidising agents

10.6 Hazardous decomposition products

Thermal oxidation may result in formation of formaldehyde and carbon monoxide

SECTION 11. Toxicological information

11.1 Information on toxicological effects

Method: OECD Guideline 420 (Acute Oral Toxicity) Species rat (male and female)

Route of administration: oral, gavage

Doses: single dose

Conclusion: LD₅₀ > 2000 mg/kg similar substance. The classification

criteria for oral acute toxicity or specific target organ toxicity by acute exposure were not met, according to GHS, CLP and 67/548/EC. Analysis based on acquired data.

Inhalation: Based on available data, the classification was not met

Dermal acute toxicity

Method: OECD Guideline 402 (Acute Dermal Toxicity) / EU

Method

B.3 (Acute Toxicity (Dermal))

Species: rabbit (male and female)

Route of administration: dermal, topic

Doses: 2000mg/kg bw

Period of exposure: 24 hours

Conclusion: LD₅₀ > 2000 mg/kg (rabbit, male/female), similar substance

Classification criteria for dermal acute toxicity, irritation or

skin corrosion or for single target organ toxicity by acute exposure, based on GHS, CLP and 67/548/EC, were met. Analysis based on acquired data for similar substance.

Irritation and skin corrosion

Classification: not determined due to lack of data.

Method: OECD Guideline 404 (Acute Dermal Irritation / Corrosion) /

EU Method B.4

Species: rabbit

Route of administration: dermal, semiocclusive

Doses: 0.5g

Period of exposure: 4hrs

Conclusion: during tests no edema was observed. Classification criteria for

dermal acute toxicity, irritation or skin corrosion or for single target organ toxicity by acute exposure, based on GHS, CLP and 67/548/EC, were not met. Analysis based on acquired data.

Eye irritation and damage

Method: OECD Guideline 405 (Acute Eye Irritation / Corrosion), equivalent method to

Species: rabbit

Route of administration: cornea, topic

Doses: 100mg/eye/specimen

Period of exposure: single dose

Conclusion: slight reversible redness of the conjunctivae was observed on

some animals Classification criteria for eye irritating, based on GHS, CLP and 67/548/EC, were not met. Analysis based on acquired data.

Skin sensitization

Method: OECD Guideline 429 (LLNA), method equivalent to

Species: rat (female)

Conclusion: Based on study results, rosin is not a moderate or strong skin

sensitizer to rats. Rosin did not show any potential to acts as

skin sensitizer. The classification criteria for skin sensitizing, based on GHS, CLP and 67/548/EC, were not met. Analysis based on acquired data.

Sensitizing effects by inhalation: May cause skin allergic response, respectively

Mutagenicity

Method: OECD Guideline 471 (Bacterial Reverse Mutation Assay); EU Method B.13/14 (Mutagenicity - Reverse Mutation Test Using Bacteria)

Conclusion: Absence of genotoxic and mutagenic effects.

Classification

criteria were not met. Analysis based on acquired data.

Based on the data available, the classification was not met.

Carcinogenicity

Toxicity for reproduction

Method: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test) NOAEL reproductive = 3000 ppm (nominal) (male and female) Not determined on F1 generation.

Conclusion: Criteria were not met and the product is not classified for

Developmental or Reproductive Toxicity according to GHS, CLP and 67/548/EC. Analysis based on acquired data.

Long exposure effects No reliable data available.

STOT - single exposure Based on available data, the classification was not met.

STOT - repeated exposure Based on available data, the classification was not met.

Respiratory risks: Based on available data, the classification was not met.

SECTION 12. Ecological information

12.1 Toxicity

Short-term toxicity

Fish

96h, LL50 < 10 mg/l (nominal, based on mortality)

Brachydanio rerio, OECD 203

48h, NOELr = 750 mg/l(nominal, based on mobility)

Aquatic invertebrates

48h, EL50 = 911 mg/l (nominal, based on mobility)

Daphnia magna, OECD 202

72h, NOELr $\geq$ 1000 mg/l (nominal, similar substance, based on growth rate and biomass)

Algae and aquatic

72h, LL50 = 1000 mg/l (nominal, similar substance, based on growth

plants rate and biomass) Selenastrum capricornutum, OECD 201

Long-term toxicity

Fish Not determined

Aquatic invertebrates Not determined

Algae and aquatic plants Not determined

Other organisms Not determined

12.2 Persistence and degradability

Abiotic degradability Not determined

Photochemical and physico-chemical elimination Not determined

Biodegradation Substance is readily biodegradable.

71% degradation after 28 days

OECD Guideline 301 D (Ready

Biodegradability: Closed Bottle Test)

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow) refer to section 9

Bioconcentration factor (BCF) 56,23 l/kg wet-wt (QSAR, regression

based m.)

Bioaccumulation factor (BAF) 694 000 (Arnot-Gobas upper trophic

m.)

12.4 Mobility in soil

Partition coefficient soil/water (Koc) $\log K_{oc} = 3,7289$ (QSAR, estimated from $\log K_{ow}$)

12.5 Results of PBT and vPvB assessment

Product does not fulfil PBT or vPvB criteria.

12.6 Other adverse effects

No information available.

SECTION 13. Disposal considerations

Recommendation

Dispose of waste to a licensed disposal site in accordance with the requirements of the local Waste Disposal Authority. Do not allow into drains, sewers and water courses

Contaminated packaging Used containers should be recycled after dust removal

SECTION 14. Transport informationLand transport (ADR/RID)

14.1 - 14.6

Not classified as dangerous in the meaning of transport regulations.

Inland waterway transport (ADN)

Not classified as dangerous in the meaning of transport regulations.

Air transport (IATA)

Not classified as dangerous in the meaning of transport regulations.

14.1 - 14.6

Sea transport (IMDG)

Not classified as dangerous in the meaning of transport regulations.

14.1 - 14.6

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBCCode

not relevant

SECTION 15. Regulatory information

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

Classification acc. to

Regulation (CE) n. 1005/2009 Not applicable

Regulation (CE) n. 1907/2006

- Annex XVII Not restricted substance.

Directive n. 2003/53/EC Not applicable.

Directive n. 2003/105/CE Substance not classified in the scope of the directive.

Regulation (CE) n. 850/2004 Not applicable.

The German Federal Water Management Act Classe WGK 1

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16. Other information

Summary of classification in section 3:

Abbreviations and acronyms

ADR: International Carriage of Goods by Road

IMDG: International Maritime Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

BCF: Bioconcentration factor

LD50: Lethal Dose 50

LC50: Lethal Concentration 50

KOC: Partition Coefficient of organic carbon

OECD: Organisation for Economic Cooperation Development

NOEL: No observed effect level

STOT: Specific Target Organ Toxicity

QSR: Quantitative Structure Activity Relationship

LLNA: Local Lymph Node Assay

Training advice

Provide adequate information, instruction and training for operators.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.