Rosin
Material Safety Data Sheet

Product Name
Rosin

Supplier
Bee Beautiful Ltd
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Cumbria LA15 8SL
Tel: 01229 467991
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Composition/Ingredients Information

Chemical composition: Mixed isomers of aromatic unsaturated complex acids, with esters, and unsaponifiable terpenic compounds.

CAS number: 8050-09-7.

EEC number: 232-475-7.

Synonyms: Colophony, Gum Resin, Pine Resin.

Hazard Identification
May cause skin irritation and/or sensitisation on repeated contact. Inhalation of airborne dust may cause irritation and respiratory sensitisation. Rosin is used as a flux in the core of wire used for soldering. The fumes generated during use of such solder (rosin pyrolysis products) are known to cause irritation and respiratory sensitisation.

First Aid Measures

Inhalation: Excessive levels of dust or pyrolysis products may cause irritation. Remove to fresh air, obtain medical attention.

Eye exposure: Dust may cause irritation by mechanical abrasion. Flush with waterf or at least 15 minutes; obtain medical attention.

Skin exposure: Avoid direct skin contact where possible. Wash material from skin using soap and water. If molten, cool with plenty of water. Do not try to remove melted resin except under medical supervision due to the possibility of tissue damage.

Ingestion: Do not induce vomiting; rinse mouth with plenty of water; do not give anything to drink. Seek medical assistance if burns have been sustained.

Fire-Fighting Measures

Extinguishing media: Any system except water-jet on crushed material CO, CO2 and smoke . Some aliphatic aldehydes and carboxylic acids could be formed.

Protective equipment: Appropriate respirator equipment.

Accidental Release Measures
Normal disposal of remaining material.

Handling and Storage

Handling: Avoid skin contact and inhalation of dust by wearing impervious gloves and mask (to EN 149). Wear eye protection if molten or dusty, Where handling produces airborne dust consider the use of local extraction.

Storage: Cool dry ambient. Spontaneous heating could occur if stored in a non-ventilated area at elevated temperatures. Avoid sources of ignition.

Ventilation: Keep storage and work areas ventilated to keep dust concentrations below acceptable exposure limits.

Exposure Control/Personal Protection
Wherever possible it is preferable to prevent skin contact and inhalation of dust by procedural controls which reduce contact dust at source.

Physical and Chemical Properties

Appearance: Friable amber-coloured solid, flake or powder.

Odour: Characteristic of pine.

Softening Range: 70 - 80oC (Ring and Ball)

Flash point: c.180oC (Pensky Martin)

Flammability: Dust can be flammable if finely divided and suspended in air

Autoignition Temp.: c.400 deg. C

SG @ 20oC: 1.065 - 1.077

% Volatiles (vol): Negligible @ 20 deg.C

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Solubility in Water: Negligible

Stability/Reactivity

Stability: Stable, but spontaneous heating may occur if stored at elevated temperatures

Reactivity

Temperature	Melts with eventual slow combustion.
Pressure	None
Shock	None
Danger of dust/air mixture	Explosion
Materials to avoid	Strong oxidants
Auto-degradation to unstable product	None

Toxicological Information
Rosin is notified in the Chemicals (Hazard Information and Packaging for Supply Regulations) 1994, Approved Supply List as a material which may cause sensitisation by skin contact. Skin sensitisation is a condition which usually develops from repeated contact. A sensitised person may experience irritation and skin reaction from subsequent exposure. Exposure to Rosin dust; there is some evidence that it can cause irritation in substantial quantities. Rosin fumes resulting from the use of solder wire with a rosin core are known to cause irritation of the respiratory tract, (i.e. an "asthmagen"), prolonged exposure may also result in an individual becoming sensitised to rosin fumes resulting in occupational asthma.

Ecological Information
Inert natural material, no known deleterious effects.

Disposal Consideration
Material and packing may be disposed of by incineration or landfill in accordance with local and national regulations. It is not listed as hazardous waste.

Transport Information
Not classified as hazardous for transport.

Regulatory Information
Classified under CHIP 2.

Hazard symbol: Xi "Irritant"

Risk Phrases: R43, May cause sensitisation by skin contact.

Safety Phrases: S2, Keep out of reach of children.
S24, Avoid contact with food

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S37, Wear suitable gloves
HSE Occupational Exposure Standard (EH40/98) for Colophony (Rosin) and for rosin core solder pyrolysis products as formaldehyde: a MEL is under review: current OES for formaldehyde is 2ppm (8 hour), 2ppm (15 minutes).

The COSHH Regulations apply to this material.

Occupational Asthma caused through exposure to rosin pyrolysis products is a prescribed disease notifiable under RIDDOR Regulations: see HSE guidance note MS25. Dust from Rosin is classified as a nuisance dust with an OEL of 10mg.m3 (8 hour TWA), with Total Respirable Dust OEL 4mg.m3 (8 hours).

This information relates only to the specific product designated and may not be valid for such product used in combination with any other materials or processes. Such information is, to the best of our knowledge and belief, accurate and reliable as of the date indicated. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy themselves as to the suitability of such information for their own particular use.

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