

Aquatint Resin (TNL 1737 – 17382)

1. Identification

Aquatint Resin.

Alternative names: Colophony Resin, Rosin, Greek Pitch.

2. Composition/Information on Ingredients

Resin extracted from Pine gum containing a high percentage of Abietic acid.

3. Hazards Identification

Will burn in a fire. Irritant to eyes, skin and respiratory pathways. Acrid fumes produced on heating. Burning will produce carbon monoxide and carbon dioxide (refer to section 16).

4. First-Aid Measures

Eye contact	Flush eye with water or approved eye wash solution. Seek medical advise should irritation occur and persist.
Skin contact	Wash off with soap and water. Molten resin should be removed with cold water immediately and medical attention sort for burns.
Inhalation	Remove to clean air and seek medical attention if subject continues to suffer respiratory difficulties.
Ingestion	No special action required. Do not induce vomiting.

5. Fire-Fighting Measures

Extinguishing media	Dry chemical, CO ₂ or foam. Use Water Spray only to cool sealed containers.
Protective equipment for Fire-fighters	Self-contained breathing apparatus.

6. Accidental Release Measures

Sweep up and dispose of small quantities as non toxic waste. Do not flush into water courses. Bulk quantities should be disposed of in consultation with the Local Authority.

7. Handling and Storage

Store in airtight containers in cool dry conditions. If dust conditions occur exhaust by forced ventilation. Store away from foodstuffs.

8. Exposure Control and Personal Protection

Observe the local bylaw in terms of dust (TWA value 10 mg/m³ ; MAK value 6mg/m³, see also item 16) and standard industrial hygiene practice. Avoid inhaling the powder using fine-dust mask with category P1 filter if fine dust limits are exceeded. Protective gloves and safety glasses are recommended.

9. Physical and Chemical Properties

Physical form	Powder.
Colour	White to yellow
Odour	Slight Terebinthinate.
pH of aqueous solution	Not applicable
Boiling point	Not determined
Melting point	70 – 80°C
Viscosity	Not applicable
Flash point	210 °C
Flammability solid/gas	Not applicable
Autoflammability	Not applicable
Explosive properties	Not applicable
Oxidising properties	Not applicable
Vapour pressure	Not applicable
Specific gravity	Not determined
Water solubility	Insoluble
Bulk density	Not determined
Partition coefficient octanol/water	Not applicable
Explosive limits	Not applicable
Thermal decomposition	Stable under normal conditions of use.
Hazardous reactions	None known.

10. Stability and Reactivity

Thermal Decomposition	Stable under normal conditions of use
Hazardous reactions	None known

11. Toxicological Information

Refer to Section 16.

12. Ecological Information

Biodegradation	Chemically inert and insoluble in water. Separation by mechanical processes (sedimentation, filtration etc.)
Fish toxicity	No data, but not expected to be harmful.
Bacterial toxicity	No data, but not expected to be harmful.

13. Disposal Considerations

Dispose of according to a recognised method of chemical waste disposal.

14. Transport Information

UN number	Not assigned
IMDG code/class	Non hazardous
ICAO/IATA (air) class	Non hazardous
RID/ADR class	Non hazardous
ADNR class	Non hazardous

15. Regulatory Information

No data available.

16. Other Information

Colophony resin may occasionally cause skin sensitisation.

Of 4000 patients subjected to patch testing in 5 European clinics, 2.9 % of males and 3.6% of females showed positive reactions to Colophony resin 20% in soft paraffin.

H.Bandmann et al., Archs derm. 1972, 106, 335.

See also E. Rudzki and D. Kleniewska Bc.J.Derm. 1970, 83, 543.

Asthma or respiratory symptoms related to work developed in 21 workers in the electronics industry exposed to solder flux fumes containing Colophony. Five of the workers had pre-existing asthma. The medium period of exposure before recognised symptoms appeared was 6 years. All the workers had a positive reaction when rechallenged with fumes of heated Colophony alone and findings suggested that it was a hypersensitivity reaction.

P.S.Burges et al., Clio Allergy, 1978, 8, 1.

A discussion on respiratory problems, including Colophony induced asthma, associated with the use of soldering fluxes.

Lancet 1979, 2,397.

A report of Colophony allergy in 5 wood-workers with positive bronchial challenge tests to the wood dust with which they worked (Oak, Makore, Mahogany, Rosewood and Pine). Also, 4 electronics workers sensitised to Colophony from soldering fluxes subsequently had asthmatic attacks induced by walking in pine woods. This might explain why a number of electronics workers with occupational asthma continued to have symptoms after leaving work.

P.S.Burges (letter) Lancet, 1979, 2, 591.

The information provided on this sheet is based on our knowledge of the product concerned at the date of issue. It is provided in good faith. Users should also bear in mind that risks may arise when a product is put to uses other than those for which it is destined.