



SAFETY DATA SHEET

PODOPHYLLUM RESIN

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY:

PRODUCT NAME: PODOPHYLLUM RESIN
PART No.: RM202
SUPPLIER: J M Loveridge plc
Southbrook Road, Southampton
Hampshire
SO15 1BH
Tel: 023 8022 2008
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2. COMPOSITION/INFORMATION ON INGREDIENTS:

CAS No.: 8050-60-0
COMPOSITION COMMENTS: Contains podophyllotoxin @ 50-60% , extracted as resin from rhizomes of Podophyllum hexandrum.

3. HAZARDS IDENTIFICATION:

Toxic in contact with skin. Irritating to eyes, respiratory system and skin.
Danger of serious damage to health by prolonged exposure.

4. FIRST AID MEASURES:

GENERAL: IN ALL CASES OF DOUBT OR WHEN SYMPTOMS PERSIST, ALWAYS SEEK MEDICAL ATTENTION
INHALATION: Move affected person to fresh air.If recovery not rapid, seek medical attention. If breathing stops, provide artificial respiration. Keep affected person warm and at rest.
INGESTION: Only when conscious, rinse mouth with plenty of water and give plenty of water to drink - (approx 500ml). DO NOT INDUCE VOMITING. In case of spontaneous vomiting, be sure that vomit can freely drain because of danger of suffocation. Keep patient at rest and obtain medical attention.
SKIN: Remove contaminated clothing. Wash affected area with plenty of soap and water. Launder clothing before re-use. Obtain medical attention.
EYES: Rinse immediately with plenty of water for at least 5 minutes while lifting the eye lids. Seek medical attention. Continue to rinse.

5. FIRE FIGHTING MEASURES:

EXTINGUISHING MEDIA:	Water spray, fog or mist. Foam, dry chemical, sand, dolomite etc.
SPECIAL FIRE FIGHTING PROCEDURES:	UNSUITABLE EXTINGUISHING MEDIA - high pressure water-jet. Take measures to retain water used for extinguishing. Do not release contaminated water into drains, soil and surface water. Dispose of contaminated water and soil according to local regulations.
HAZARDOUS COMBUSTION PRODUCTS:	Burning may release oxides of carbon and other hazardous gases or vapours.
PROTECTIVE MEASURES IN FIRE:	Fire fighters should wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES:

PERSONAL PRECAUTION IN SPILL:	Avoid breathing dust. Avoid direct contact with skin, eyes and clothing.
PRECAUTIONS TO PROTECT ENVIRONMENT:	Prevent contamination of soil, drains and surface water.
SPILL CLEANUP METHODS:	Avoid dry sweeping or other methods which raise dust. Cover spillage with damp inert material, take-up or collect and place into a suitable closable labelled container for disposal. Wash the area clean with water and detergent, observing environmental requirements.

7. HANDLING AND STORAGE:

USAGE PRECAUTIONS:	HANDLING - Product should be used in accordance with good industrial principles for handling and storing of hazardous chemicals. Minimise creation of air-borne dust by application of good occupational hygiene principles, appropriate control measures and extraction techniques. Avoid contact with skin or eyes.
STORAGE PRECAUTIONS:	Avoid direct sunlight. Store in a cool, dry, well ventilated place, in securely closed original container. Keep away from food and drink. Dust formation is potentially explosive.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

INGREDIENT COMMENTS:	No OES assigned, but LTEL (8-hour TWA ref. period) of 1 mg.m3 is recommended.
VENTILATION:	Work in a fume cupboard or use local exhaust ventilation. Respiratory protection required in insufficiently ventilated working areas.
RESPIRATORS:	If unable to control dust emissions below the suggested limit, an approved dust protection to P3 standard is recommended.
PROTECTIVE GLOVES:	Use impervious gloves made of polyvinyl alcohol (PVA) or PTFE (teflon).
EYE PROTECTION:	Approved chemical safety goggles or face protection.
OTHER PROTECTION:	Wear suitable personal protective equipment appropriate to the task.
HYGIENIC WORK PRACTICES:	SKIN PROTECTION - apply barrier cream to hands and exposed skin. Regularly vacuum dust to minimise the potential of air-borne exposure. Promptly remove contaminated clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE:	Amorphous yellow to brown powder.
ODOUR/TASTE:	Resinous/aromatic odour.
SOLUBILITY DESCRIPTION:	Slightly soluble in water.
AUTO IGNITION TEMP. (°C):	Will burn in fire situation.

10. STABILITY AND REACTIVITY:

STABILITY:	Stable under normal conditions of use.
CONDITIONS TO AVOID:	Avoid prolonged exposure to light.
HAZARDOUS DECOMP. PRODUCTS:	Thermal decomposition or burning may release oxides of carbon or other hazardous gases, acrid smoke and irritating fumes.

11. TOXICOLOGICAL INFORMATION:

Toxicological data	LD50. Rat. 14.5 mg/kg (intravenous)
TOXICOLOGICAL INFORMATION:	Human death has occurred following topical application of 325mg (preparation) dose.
HEALTH HAZARDS, GENERAL:	Dust will severely irritate membranes of nose, throat, lungs and eyes.
INGESTION:	Can cause severe systemic toxicity, usually reversible but fatalities have been reported.
SKIN:	Topical application may produce symptoms similar to those of ingestion.
OTHER HEALTH EFFECTS:	Risk of systemic toxicity after topical application with excessive amounts of preparation over prolonged periods of use.
ROUTE OF ENTRY:	Inhalation, skin absorption and eye contact.
TARGET ORGANS:	Central nervous system, eyes, skin and respiratory system.
MEDICAL SYMPTOMS:	Symptoms of acute toxicity may include nausea, vomiting, abdominal pain and diarrhoea. Symptoms may not appear until several hours after exposure. Effects on central nervous system are often delayed in onset and can include psychotic reactions, hallucinations, dizziness, seizure and coma.
MEDICAL CONSIDERATIONS:	Avoid handling during pregnancy.

12. ECOLOGICAL INFORMATION:

ECOLOGICAL INFORMATION:	No specific information available, but material is expected to have adverse effect on the environment.
MOBILITY:	Insoluble in water. (can be separated from aqueous systems by sedimentation and/or filtration techniques.

13. DISPOSAL CONSIDERATIONS:

DISPOSAL METHODS: This material and/or its container must be disposed of as hazardous waste according to Special Waste Regulations 1996 or according to local regulations, in compliance with Duty of Care Regulations and Special Waste Regulations.

WASTE CLASS: WASTE CODE: 0705** HAZARDOUS PROPERTY: H6

14. TRANSPORT INFORMATION:

UN No. ROAD: 2811

UK ROAD PACK GR.: III

ADR CLASS No.: 6.1

ADR CLASS: Division 6.1: Toxic substances.

ADR ITEM No.: 25°(c)

HAZARD No. (ADR): 60 Toxic or slightly toxic substance.

ADR MARGINAL: 2601

HAZCHEM CODE: 2XE

PROPER SHIPPING NAME I: TOXIC SOLID, ORGANIC, NOS

PROPER SHIPPING NAME II: TECHNICAL NAME - (Podophyllum resin)

UN No. SEA: UN 2811

IMDG CLASS: 6.1

IMDG PAGE No.: 6270-6

IMDG PACK GR.: III

UN No., AIR: UN-ID 2811

ICAO CLASS: 6.1

AIR PACK GR.: III

15. REGULATORY INFORMATION:

LABEL FOR SUPPLY:

RISK PHRASES: R-24 Toxic in contact with skin.
R-36/37/38 Irritating to eyes, respiratory system and skin.

	R-48 Danger of serious damage to health by prolonged exposure.
SAFETY PHRASES:	S-22 Do not breathe dust. S-24/25 Avoid contact with skin and eyes. S-37 Wear suitable gloves. S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S-45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
UK REGULATORY REFERENCES:	Classification, Packaging and Labelling Regulations 1984. Chemicals (Hazard Information & Packaging) Regulations 1993.

16. OTHER INFORMATION:

INFORMATION SOURCES:	This product has been classified in accordance with CHIP3 regulations.
REVISION COMMENTS:	Edition 01; Revised item(s):
ISSUED BY:	MK
SDS No.:	357
DATE:	12/07/02
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