2 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT Not hazardous according to Directive 67/548/EEC.

3 - Composition/Information on Ingredients

Product Name		CAS#	EC no	Annex I
OSTHOLE		484-12-8	None	None
Ingredient Name	Percent	CAS#	EC no	Annex I
WATER	<= 2	7732-18-5	231-791-2	None

Formula C15H16O3 244.29 AMU Molecular Weight Osthol, Synonyms

7-methoxy-8-(3-methyl-2-butenyl)coumarin;

8-(3-methyl-2-butenyl)herniarin 4 - First Aid Measures

AFTER INHALATION

If inhaled, remove to fresh air. If breathing becomes difficult,

call a physician. AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious amounts of water.

AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by

separating the eyelids with fingers. Call a physician. AFTER INGESTION If swallowed, wash out mouth with water provided person is

conscious. Call a physician. 5 - Fire Fighting Measures

EXTINGUISHING MEDIA Suitable: Water spray. Carbon dioxide, dry chemical powder, or

appropriate foam.

SPECIAL RISKS Specific Hazard(s): Emits toxic fumes under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

PROCEDURE(S) OF PERSONAL PRECAUTION(S) Exercise appropriate precautions to minimize direct contact with

6 - Accidental Release Measures

skin or eyes and prevent inhalation of dust.

METHODS FOR CLEANING UP Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage HANDLING

ENGINEERING CONTROLS

with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE Conditions of Storage: Keep tightly closed.

Directions for Safe Handling: Avoid inhalation. Avoid contact

8 - Exposure Controls / Personal Protection

Property

Safety shower and eye bath. Mechanical exhaust required. GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT Respiratory Protection: Use respirators and components tested and

or CEN (EU). Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks.

Hand Protection: Protective gloves. Eye Protection: Chemical safety goggles. 9 - Physical and Chemical Properties Appearance Physical State: Solid

Value

N/A

N/A

At Temperature or Pressure

approved under appropriate government standards such as NIOSH (US)

pН BP/BP Range

BI /BI Runge	1 1/1 1
MP/MP Range	83.5 °C
Flash Point	N/A
Flammability	N/A
Autoignition Temp	N/A
Oxidizing Properties	N/A
Explosive Properties	N/A
Explosion Limits	N/A
Vapor Pressure	N/A
Partition Coefficient	Log Kow: 3.95
Viscosity	N/Å
Vapor Density	N/A
Saturated Vapor Conc.	N/A
Evaporation Rate	N/A
Bulk Density	N/A
Decomposition Temp.	N/A
Solvent Content	N/A
Water Content	N/A
Surface Tension	N/A
Conductivity	N/A
Miscellaneous Data	N/A
Solubility	Solubility in Water:Soluble.
10 - Stability and Reactivity	
STABILITY	

HAZARDOUS POLYMERIZATION Hazardous Polymerization: Will not occur

11 - Toxicological Information

Stable: Stable.

ACUTE TOXICITY LDLO Intravenous

Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

LD50 Oral Rat

Rabbit 25 mg/kg

Respiration: Dyspnea. LD50 Intraperitoneal Rat 600 MG/KG Remarks: Behavioral: Convulsions or effect on seizure threshold. Lungs, Thorax, or Respiration: Dyspnea. Behavioral: Muscle

LD50

Mouse 190 MG/KG

LD50

Subcutaneous Mouse 16 MG/KG

Intraperitoneal

contraction or spasticity.

Respiration: Dyspnea.

SIGNS AND SYMPTOMS OF EXPOSURE

Remarks: Behavioral: Convulsions or effect on seizure threshold. Behavioral: Muscle contraction or spasticity. Lungs, Thorax, or

Remarks: Behavioral: Convulsions or effect on seizure threshold. Behavioral: Muscle contraction or spasticity. Lungs, Thorax, or

ROUTE OF EXPOSURE Skin Contact: May cause skin irritation. Skin Absorption: May be harmful if absorbed through the skin.

of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local

To the best of our knowledge, the chemical, physical, and

toxicological properties have not been thoroughly investigated.

Eye Contact: May cause eye irritation. Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract. Ingestion: May be harmful if swallowed.

12 - Ecological Information

13 - Disposal Considerations SUBSTANCE DISPOSAL Contact a licensed professional waste disposal service to dispose

No data available.

RID/ADR

IATA

14 - Transport Information

Non-hazardous for road transport.

Non-hazardous for air transport.

environmental regulations.

IMDG Non-hazardous for sea transport.

Not hazardous according to Directive 67/548/EEC. COUNTRY SPECIFIC INFORMATION

15 - Regulatory Information

Germany

16 - Other Information

WGK: 1 Self-Classification

> For R&D use only. Not for drug, household or other uses. WARRANTY:

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any guarantee of the properties of the product. Lookchem shall not be held liable for any damage

resulting from handling or from contact with the above product. See reverse side of invoice or packing

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent

slip for additional terms and conditions of sale.