

Kettenbach GmbH & Co. KG

according to 2001/58/EC

Nelkenöl (Eugenol)

Print date: 13.03.2006 Page 1 of 4

1. Identification of the substance/preparation and of the company/undertaking

1.1 Identification of the substance or preparation Nelkenöl (Eugenol)

Further product name Eugenol - zinc oxide combined pack.

Eugenol-zinc oxide - cavity liner and temporary filling Use of the substance/preparation

material.

1.2 Company/undertaking identification

Kettenbach GmbH & Co. KG Company name:

Street: Im Heerfeld 7 D-35713 Eschenburg Place:

Contact person: Quality Assurance Manager

Telephone: +49(0) 2774/705-0 Telefax: +49 (0)2774/705-33 e-mail: info@kettenbach.de

Internet: www.kettenbach.de

2. Composition/information on ingredients

Essential oil. **Chemical characterization**

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
284-638-7	8000-34-8	Clove oil	85 %	Xn, Xi R38-65-21/22

Full text of each relevant R phrase can be found in heading 16.

3. Hazards identification

Classification Symbols: Harmful, Irritant

> R-phrases: Irritating to skin.

Harmful: may cause lung damage if swallowed. Harmful in contact with skin and if swallowed.

4. First aid measures

General information Change contaminated clothing.

> Symptoms of poisoning may develop several hours following exposure. Victim should be under medical observation for at least 48 hours after

exposure.

After inhalation If victim is at risk of losing consciousness, position and transport on their

After contact with skin After contact with skin, wash immediately with: Water and soap.

After contact with eyes After contact with eye rinse immediately with lot of water at least 5 minutes

with open eyelid. Subsequently consult an opthalmologist.

After ingestion Consult physician immediately.



Kettenbach GmbH & Co. KG

according to 2001/58/EC

Nelkenöl (Eugenol)

Print date: 13.03.2006 Page 2 of 4

5. Fire-fighting measures

Suitable extinguishing media Extinguishing materials should be selected according to the surrounding

area.

Special protective equipment for fire-fighters

No special measures are necessary.

6. Accidental release measures

Personal precautions Provide adequate ventilation.

Environmental precautionsDo not empty into drains or the aquatic environment.

Methods for cleaning up/taking up Collect mechanically.

7. Handling and storage

7.1 Handling

Advice on safe handling Use only in well-ventilated areas. Keep away from sources of

ignition. No smoking.

Advice on protection against fire and explosion
No special precautionary measures are necessary.

7.2 Storage

Requirements for storage rooms and vessels

No special requirements.

8. Exposure controls/personal protection

8.1 Exposure limit values

8.2 Exposure controls

Occupational exposure controls

See chapter 7. No further action is necessary.

When using do not eat, drink, smoke or sneeze. Take off immediately all contaminated clothing

Wash hands when done working with material; at breaks, lunch, shift

changes, etc.

Avoid contact with skin, eye and clothing.

Hand protection Chemical protective gloves must be chosen carefully in view of their design

and depending on the dependence on the concentration and amounts of

dangerous goods used in the specific working tasks.

Eye protection Framed glasses.

Skin protection Lab apron.





according to 2001/58/EC

Nelkenöl (Eugenol)

Print date: 13.03.2006 Page 3 of 4

9. Physical and chemical properties

9.1 General information

Physical state: liquid

Colour : colourless - yellow Odour : characteristic

9.2 Important health, safety and environmental information

Test method

pH-Value:

Changes in the physical state

Flash point : ca. 110 °C

Density (at 20 °C) : 1,04 g/cm³

Water solubility : insoluble

at (20 °C)

10. Stability and reactivity

Conditions to avoid None by intended use.

Materials to avoid Oxidizing agents, strong.

Hazardous decomposition products irrelevant

11. Toxicological information

Acute toxicity Acute toxicity, oral:

LD50: 2.650 mg/kg rat.

Acute toxicity, dermal: LD50: > 5.000 mg/kg

LD50: >5.000 mg/kg rabbit.

Irritant effect on the eye: Not an irritant.

Sensitising effects no danger of sensitization.

12. Ecological information

Ecotoxicity Aquatoxicity EC50: (48h) 3,4 mg/l (daphnia)

Additional information Doesn't get into the sewage water as long as the process is carried out

according to regulations. Leakage into the environment must be prevented.

13. Disposal considerations

Advice on disposal Dispose of waste according to applicable local, state, and federal

regulations. Do not empty into drains.

Contaminated packaging

Completely emptied packings can be re-cycled.



Kettenbach GmbH & Co. KG

according to 2001/58/EC

Nelkenöl (Eugenol)

Print date: 13.03.2006 Page 4 of 4

14. Transport information

Land transport (ADR/RID)

Inland waterways transport

Marine transport

Air transport

<u>Futher Information</u> Not a hazardous material with respect to these transportation

regulations.

15. Regulatory information

15.1 Labelling

Indication of danger: Xn - Harmful



Xn - Harmful

Labelling according to EC-guidelines: The product is classified and marked according to EC-regulations or

according to the corresponding national laws.

Hazardous component(s) to be indicated on label Clove oil

R phrases: 38 Irritating to skin.

21/22 Harmful in contact with skin and if swallowed.

S phrases : 62 If swallowed, do not induce vomiting: seek medical advice

immediately and show this container or label.

36/37 Wear suitable protective clothing and gloves.

15.2 National regulations

Water contaminating class : 2 - water contaminating

16. Other information

List of relevant R phrases

38 Irritating to skin.

Harmful: may cause lung damage if swallowed.

Harmful in contact with skin and if swallowed.

Other data

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

The receiver of our product is singulary responsible for adhering to existing laws and regulations.