



Material Safety Data Sheet

According to EU Regulation 1907/2006 in the current version

Date 13.05.2016

Version 1.0

ZINC RICINOLEATE

1. Identification of the substance/preparation and the company

Trade name: Zinc ricinoleate
Utilization: Raw material for cosmetic formulations
Supplier company: **Elemental SRL**, Piata Cazarmii no.15, 410188-Oradea, jud.Bihor, Romania
identification: Tel/Fax: +40259-436.755, www.elemental.eu
Emergency: RO: numar national pentru cazuri de urgenta: 021 3183606 Institutul de Sanatate Publica Bucuresti. International emergency number: +49 180 2273-112

2. Hazards Identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

No particular hazards known.

2.2. Label elements

The product does not require a hazard warning label in accordance with GHS. The normal safety precautions for the handling of chemicals must be observed.

2.3. Other hazards: None known

3. Composition / Information on ingredients

Category: Deodorant Agent / Odor Absorber Source: vegetable

Ingredients according to INCI: Zinc Ricinoleate

REACH status: Reg.-No.: 01-2119956639-19 CAS no.: 13040-19-2 EINECS / EC No.: 235-911-4

3.1. Substances

No hazardous ingredients acc. the 1999/45/EC and 67/548/EEC directives.

3.2. Mixtures: - -

4. First Aid

4.1. Description of first aid measures

General advice : Remove contaminated clothing.

Inhalation : Ensure supply of fresh air.

In the event of symptoms take medical treatment.

Skin contact : In case of contact with skin wash off immediately with soap and water. Consult a doctor if skin irritation persists.

Eye contact : In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice

Ingestion : Thoroughly clean the mouth with water. Seek medical advice immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms : No information is on file to date regarding acute and/or delayed post-exposure symptoms and effects.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting Measures

5.1. Extinguishing media

Suitable extinguishing media: foam, carbon dioxide, dry powder, water spray.



Material Safety Data Sheet

According to EU Regulation 1907/2006 in the current version

Date 13.05.2016

Version 1.0

ZINC RICINOLEATE

Unsuitable extinguishing media: not applicable

5.2. Special hazards arising from the substance or mixture

In the event of fire the following can be released: - carbon dioxide, carbon monoxide, - Zinc oxide

5.3. Advice for firefighters

Do not inhale explosion and/or combustion gases. Use self-contained breathing apparatus and wear protective suit.

6. Accidental release measures:

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Forms slippery/greasy layers with water.

6.2. Environmental precautions

Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up

Pick up mechanically. Dispose of absorbed material in accordance with the regulations.

6.4. Reference to other sections

For further information on exposure monitoring and disposal see sections 8 and 13.

7. Handling and Storage

7.1. Precautions for safe handling

Advice on safe handling: Ensure adequate ventilation. Provide exhaust ventilation if dust is formed.

Hygiene measures : Do not eat, drink or smoke when working. Wash hands before breaks and after work.

General protective measures : Avoid contact with eyes and skin

7.2. Conditions for safe storage, including any incompatibilities

Prevention of fire and explosion Information : No special measures required.

Storage Information : Keep only in original container.

Further information on storage conditions: Keep container closed. Keep container in a cool, well-ventilated place.

German storage class : 13

7.3. Specific end use(s): No further recommendations.

8. Exposure Controls and Personal Protection

Contains no substances with occupational exposure limit values.

DNEL : No DNEL/DMEL values on file. PNEC : No PNEC values on file.

8.2. Exposure controls

Eye protection : goggles with side pieces



Hand protection :

Glove material: gloves made of natural latex Break through time: > 480 min Glove thickness: 0,6 mm

Glove material: gloves made of chloroprene (CR, e.g. Neoprene) Break through time: > 480 min

Glove material: gloves made of nitril (NBR) Break through time: > 480 min Glove thickness: 0,1 mm

Glove material: protective gloves made of fluorinated rubber (FKM, e.g. Viton)

Break through time: > 480 min Glove thickness: 0,7 mm Glove material: gloves made of butyl (IIR)

Break through time: > 480 min Glove thickness: 0,3 mm

Body Protection : protective clothing

Respiratory protection: in case of formation of vapours/dusts:

Short term: filter apparatus. combination filter A-P2

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties



Material Safety Data Sheet

According to EU Regulation 1907/2006 in the current version

Date 13.05.2016

Version 1.0

ZINC RICINOLEATE

Physical state : solid
Form : Pellets
Colour : beige
Odour : characteristic
Odour Threshold : not measured
pH : not applicable
Melting point : Melting temperature ca. 71 °C
Boiling point : not measured
Flash point : > 250 °C
Evaporation rate : not measured
Flammability : no data available
Upper Explosion/Ignition Limit: Not measured
Lower explosion limit : Not measured
Vapour pressure : Not measured
Relative vapour density: not measured
Relative density : no data available
Solubility : not measured
Water solubility : insoluble
Partition coefficient (n-octanol/water): not measured
Autoignition temperature: not measured
Thermal decomposition: no data available
Viscosity, kinematic : no data available
Viscosity, dynamic : not applicable
Explosive properties : not measured
Oxidising properties : not measured
9.2. Other information
Bulk density : ca. 600 kg/m³ (20 °C)
Metal corrosion : not measured
Ignition temperature : ca. 440 °C

10. Stability and Reactivity

- 10.1. Reactivity: see section 10.3
- 10.2. Chemical stability: The product is stable under normal conditions.
- 10.3. Possibility of hazardous reactions: No hazardous reactions with proper storage and handling.
- 10.4. Conditions to avoid
- 10.5. Incompatible materials: Unknown
- 10.6. Hazardous decomposition products: no data available

11. Toxicological Information

- 11.1. Information on toxicological effects
Acute toxicity (oral) : LD50 Species: Rat Dose: > 2.000 mg/kg Method: OECD Test Guideline 401
Remarks: Values refer to the main component.
Acute toxicity (inhalation): no data available
Acute toxicity (dermal): no data available
Irritation/corrosion of the skin: Species: rabbit Result: non-irritant Method: OECD 404
Remarks: Values refer to the main component.
Serious eye damage/eye irritation: Species: rabbit Result: non-irritant Method: OECD 405



Material Safety Data Sheet

According to EU Regulation 1907/2006 in the current version

Date 13.05.2016

Version 1.0

ZINC RICINOLEATE

Remarks: Values refer to the main component.

Respiratory/skin sensitization: Species: Guinea pig Result: non-sensitizing

Classification: Did not cause sensitization on laboratory animals. Method: OECD 406

Repeated dose toxicity: no data available

CMR assessment

Carcinogenicity : no data available Mutagenicity : no data available

Teratogenicity : no data available Toxicity to reproduction: no data available

Specific Target Organ Toxicity -: no data available

Single exposure Specific Target Organ Toxicity - Repeated exposure: no data available

12. Ecological Information

Ecotoxicology Assessment

Acute aquatic toxicity : no data available Chronic aquatic toxicity: no data available

12.1. Toxicity

Aquatic toxicity, fish : Species: gold orfe LC50: 27 mg/l Method: OECD 203 Remarks: Values refer to the main

component. Aquatic toxicity, invertebrates: no data available Aquatic toxicity, algae /aquatic plants: no data available

Toxicity in microorganisms: no data available. Chronic toxicity in fish : no data available Chronic toxicity in aquatic

Invertebrates: no data available. Toxicity in organisms which live in the soil: no data available Toxicity in terrestrial

plants: no data available. Toxicity to Above Ground Organisms: no data available

12.2. Persistence and degradability

Photodegradation : no data available

Biological degradability: Biological degradability: 99 % Method: OECD 301 D

Remarks: Values refer to the main component.

Physico-chemical removability: no data available Biochemical Oxygen Demand (BOD): no data available

Chemical Oxygen Demand (COD) relation of BOD/COD : no data available

Dissolved organic carbon (DOC): no data available Adsorbed organic bound halogens (AOX): no data available

Distribution among environmental compartments: no data available

12.3. Bioaccumulative potential

Bioaccumulation : no data available

12.4. Mobility in soil

Environmental distribution: no data available

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment: No data available

12.6. Other adverse effects

General Information : Do not allow to enter soil, waterways or waste water canal.

The product is considered to be a weak water pollutant (German law).

13. Disposal Considerations

13.1. Waste treatment methods

Product : In accordance with local authority regulations, take to special waste incineration plant

Contaminated packaging : If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards.

14. Transport Information

Not dangerous according to transport regulations.

14.1. UN number: --



Material Safety Data Sheet

According to EU Regulation 1907/2006 in the current version

Date 13.05.2016

Version 1.0

ZINC RICINOLEATE

- 14.2. UN proper shipping name: --
- 14.3. Transport hazard class(es): --
- 14.4. Packing group: --
- 14.5. Environmental hazards: --
- 14.6 Special precautions for user: No

15. Additional Regulatory Information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National legislation

Technical instructions on Air Quality: 5.2.1

Major Accident, Hazard Legislation: ---

Water contaminating class (Germany): low hazard to waters

Classification acc. to German law

Risk classification according to BetrSichV (Germany): ---

Other regulations : none

15.2. Chemical safety assessment

Chemical safety assessment: No chemical safety assessment was carried out for this product.

16. Other Information

Disclaimer:

This material safety data sheet does not constitute a guarantee of the properties of the product and is not a contractual legal report. The information is given in good faith on the basis of our best knowledge of the product at the indicated time. However, we cannot accept responsibility or liability for any consequences arising from its use, no warranty for correctness and completeness is given. We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned. It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.

Abbreviations:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.