

Nanocin material safety data sheet

ACCORDING TO 1907/2006/EC, ARTICLE 31

19.05.2019

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

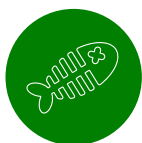
- Product identifier
- Trade name: Nanocin™
- Relevant identified uses of the substance or mixture and uses advised against. No further relevant information available.
- Application of the substance / the mixture Disinfectant
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier: Tecrea Ltd, 2 Royal College Street, London, NW1 0NH, United Kingdom UK registration: #07966622
- Emergency telephone number: +44 (0)20 7468 5272

2. Hazards identification

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



H315 Causes skin irritation
H317 May cause an allergic skin reaction
H335 May cause respiratory irritation



R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- Label elements
- Labelling according to Regulation (EC) No 1272/2008. The substance is classified and labelled according to the CLP regulation
- Hazard pictograms GHS07
- Signal word Warning
- Hazard statements H315 Causes skin irritation H317 May cause an allergic skin reaction H335 May cause respiratory irritation
- Precautionary statements
P261 Avoid breathing dust/fume/gas/mist/vapours/spray
P280 Wear protective gloves/protective clothing/eye protection/face protection
P362 Take off contaminated clothing
P363 Wash contaminated clothing before reuse
P405 Store locked up
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable
- vPvB: Not applicable

3. Composition/information on ingredients

Chemical characterization: Substances: Nanocin™

4. First aid measures

- Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- After inhalation:
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.
- After skin contact:
Immediately rinse with water.
If skin irritation continues, consult a doctor.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Do not induce vomiting; call for medical help immediately.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5. Fire fighting measures

- Extinguishing media
- Suitable extinguishing agents:
Use fire extinguishing methods suitable to surrounding conditions.
Water spray
Foam
Carbon dioxide
- Special hazards arising from the substance or mixture
Formation of toxic gases is possible during heating or in case of fire.
- Advice for firefighters
- Protective equipment: Wear self-contained respiratory protective device.

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6. Accidental release measures

- Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
- Ensure adequate ventilation
- Environmental precautions:
- Inform respective authorities in case of seepage into water course or sewage system.
- Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7. Handling and storage

- Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- Information about fire - and explosion protection:
No special measures required.
- Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles:
No special requirements.
- Information about storage in one common storage facility:
Not required.
- Further information about storage conditions: Store in cool, dry conditions in well-sealed receptacles.
- Specific end use(s): No further relevant information available.

8. Exposure controls/personal protection

- Additional information about design of technical facilities:
No further data; see item 7.
- Control parameters
- Ingredients with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists valid during the making were used as basis.
- Exposure controls
- Personal protective equipment:
- General protective and hygienic measures:
The usual precautionary measures are to be adhered to

- when handling chemicals.
Immediately remove all soiled and contaminated clothing
Avoid contact with the skin.
Avoid contact with the eyes.
Be sure to clean skin thoroughly after work and before breaks.
Use skin protection cream for skin protection.
- Respiratory protection:
Short term filter device:
Filter P2
- Protection of hands:



Protective gloves

- Material of gloves
Nitrile rubber, NBR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- Eye protection:



Tightly sealed goggles

- Body protection: Protective work clothing

9. Physical and chemical properties

- Information on basic physical and chemical properties
- General Information
- Appearance:
Form: Fluid
Colour: Clear
- Odour: odourless
- pH-value (- g/l) at 20 °C (68 °F): 5.0 - 6.0
- Change in condition
Melting point/Melting range: ca 0 °C (ca 32 °F)
Boiling point/Boiling range: 102 °C (216 °F)
- Flash point: Not applicable.
- Danger of explosion: Product does not present an explosion hazard.
- Density: Not determined.
- Relative density at 20 °C (68 °F) 1.040 - 1.050 g/cm³
(8.679 - 8.762 lbs/gal)
- Solubility in / Miscibility with water: Fully miscible.
- Other information No further relevant information available.

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10. Stability and reactivity

- Reactivity
- Chemical stability
- Thermal decomposition / conditions to be avoided:
No decomposition if used and stored according to specifications.
- Possibility of hazardous reactions Reacts with oxidizing agents.
- Conditions to avoid:
No further relevant information available.
- Incompatible materials:
No further relevant information available.
- Hazardous decomposition products:
No dangerous decomposition products known.

11. Toxicological information

- Information on toxicological effects
- Acute toxicity:
LD/LC50 values relevant for classification:
Oral LD50 >2000 mg/kg (rat)
- Primary irritant effect:
- on the skin: Irritant to skin and mucous membranes.
- on the eye: May have an irritating effect.
- Sensitization: Sensitization possible through skin contact.

12. Ecological information

- Toxicity
- Aquatic toxicity:
EC50 (48h) 0.09 mg/l (Daphnia)
EC50(72h) 0.019 mg/l (Algen)
LC50 (96h) 0.026 mg/l (Fish)
- Persistence and degradability Not easily biodegradable
- Behaviour in environmental systems:
- Bioaccumulative potential
Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.
- Mobility in soil No further relevant information available.
- Ecotoxicological effects:
- Remark:
Very toxic for fish
Very toxic for water fleas.
Very toxic for algae
- Additional ecological information:
- Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13. Disposal considerations

- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents

14. Transport information

- UN-Number
- ADR, IMDG, IATA 3082
- UN proper shipping name
- ADR 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
- IMDG, IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
- (Nanocin 0.1% wt.vol)
- Transport hazard class(es)
ADR, IMDG, IATA
- Class 9 Miscellaneous dangerous substances and articles.
- Packing group
ADR, IMDG, IATA III
- Environmental hazards:
Marine pollutant: Symbol (fish and tree)
Special marking (ADR): Symbol (fish and tree)
Special marking (IATA): Symbol (fish and tree)
Special precautions for user Warning: Miscellaneous dangerous substances and articles.
EMS Number: F-A,S-F
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
UN "Model Regulation": UN3082, ENVIRONMENTALLY

15. Regulatory information

- CHEMICAL SAFETY ASSESSMENT: A CHEMICAL SAFETY ASSESSMENT HAS NOT BEEN CARRIED OUT.

16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing MSDS: Tecrea Ltd, UK
Quality Assurance
- Contact: liam.good@tecrea.co.uk
- Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organization
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent