Safety data sheet

1. Substance/preparation and company identification

HEXAMOLL* DINCH

Use: Chemical

Company:
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GERMANY
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Emergency information:
Telephone: +49 180 2273-112
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2. Hazard identification

none

3. Composition/information on ingredients

Chemical nature

1,2-Cyclohexanedicarboxylic acid, diisononyl ester
CAS Number: 166412-78-8
EC-Number: 431-890-2

4. First-aid measures

General advice:
Remove contaminated clothing.

If inhaled:
If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

On skin contact:
Wash thoroughly with soap and water.

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:
Rinse mouth and then drink plenty of water.

Note to physician:
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-fighting measures

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

Special protective equipment:
Wear a self-contained breathing apparatus.

Further information:
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.
Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.

6. Accidental release measures

Personal precautions:
Handle in accordance with good industrial hygiene and safety practice.

Environmental precautions:
Do not empty into drains.

Methods for cleaning up or taking up:
Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

7. Handling and storage

Handling

Ensure thorough ventilation of stores and work areas.

Storage

Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

8. Exposure controls and personal protection

Personal protective equipment

Hand protection:
Chemical resistant protective gloves (EN 374)
nitrile rubber (NBR) - 0.4 mm coating thickness
Manufacturer's directions for use should be observed because of great diversity of types.
Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374):
Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Eye protection:
Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:
Body protection must be chosen based on level of activity and exposure.

General safety and hygiene measures:
Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Form:	liquid	
Colour:	colourless	
Odour:	almost odourless	
pH value:	approx. 7	
pour point:	-54 °C	(DIN ISO 3016)
Boiling range:	240 - 250 °C (7 mbar)	(DIN 53171)
Flash point:	224 °C	(DIN ISO 2592)
Ignition temperature:	330 °C	(DIN 51794)

Vapour pressure:	0.0000013 hPa (50 °C)	
Density:	0.944 - 0.954 g/cm3 (20 °C)	(DIN 51757)
Solubility in water:	< 0.02 mg/l (25 °C)	
Solubility (qualitative) solvent(s):	organic solvents soluble	
Partitioning coefficient n-octanol/water (log Pow):	10 (25 °C)	(Directive 92/69/EEC, A.8)
adsorption/water - soil:	log KOC: 6.59 Adsorption to solid soil phase is expected.	(OECD draft - Adsorp. Coeff.(HPLC method))
Surface tension:	30.7 mN/m (20 °C)	(DIN EN 14370)
Viscosity, dynamic:	44 - 60 mPa.s (20 °C) The value was determined by calculation from the detected kinematic viscosisty.	

10. Stability and reactivity

Hazardous reactions:
Reacts with strong oxidizing agents.

No hazardous reactions if stored and handled as prescribed/indicated.

11. Toxicological information

Acute toxicity

Assessment of acute toxicity:
Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

LD50 rat (oral): > 5,000 mg/kg (OECD Guideline 423)

LD50 rat (dermal): > 2,000 mg/kg (OECD Guideline 402)

Irritation

Assessment of irritating effects:
Not irritating to the skin. Not irritating to the eyes.

Primary skin irritation rabbit: non-irritant (OECD Guideline 404)

Primary irritations of the mucous membrane rabbit: non-irritant (OECD Guideline 405)

Sensitization

Assessment of sensitization:
Skin sensitizing effects were not observed in animal studies.

Guinea pig maximization test guinea pig: Non-sensitizing. (OECD Guideline 406)

Genetic toxicity

Assessment of mutagenicity:
No mutagenic effect was found in various tests with bacteria, microorganims and mammalian cell culture. The substance was not mutagenic in studies with mammals.

Carcinogenicity

Assessment of carcinogenicity:
In long-term animal studies in which the substance was given in high concentrations by feed, a carcinogenic effect was not observed.

Reproductive toxicity

Assessment of reproduction toxicity:
The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:
No indications of a developmental toxic / teratogenic effect were seen in animal studies.

12. Ecological information

Ecotoxicity

Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish:
LC50 (96 h) > 100 mg/l, Brachydanio rerio (OECD 203; ISO 7346; 84/449/EEC, C.1, static)
Tested above maximum solubility. The details of the toxic effect relate to the nominal concentration.

Aquatic invertebrates:
EC50 (48 h) > 100 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)
The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An eluate has been tested.

Aquatic plants:
EC50 (72 h) > 100 mg/l (growth rate), Scenedesmus subspicatus (OECD Guideline 201, static)

The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An eluate has been tested.

Microorganisms/Effect on activated sludge:
EC20 (180 min) > 1,000 mg/l, activated sludge, domestic, aerobic (DIN EN ISO 8192-OECD 209-88/302/EEC,P. C, aquatic)

Chronic toxicity to aquatic invertebrates:
No observed effect concentration (21 d), >= 0.021 mg/l, Daphnia magna (OECD Guideline 211, semistatic)
The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested. Limit concentration test only (LIMIT test).

Soil living organisms:
LC50 (14 d) > 1,000 mg/kg, Eisenia foetida (OECD Guideline 207, artificial soil)
The details of the toxic effect relate to the nominal concentration.

Terrestrial plants:
No observed effect concentration (20 d) > 1.000 mg/kg, Avena sativa (OECD Guideline 208)

No observed effect concentration (21 d) > 1.000 mg/kg, Brassica napus (OECD Guideline 208)

No observed effect concentration (21 d) > 1.000 mg/kg, Vicia sativa (OECD Guideline 208)

Persistence and degradability

Assessment biodegradation and elimination (H2O):
Biodegradable.

Elimination information:
90 - 100 % CO2 formation relative to the theoretical value (60 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) (aerobic, activated sludge, domestic, non-adapted)

70 - 80 % CO2 formation relative to the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) (aerobic, activated sludge, domestic, adapted)

Bioaccumulation potential

Bioaccumulation potential:
Bioconcentration factor: 189 (30 d), Brachydanio rerio (OECD Guideline 305 E)
Accumulation in organisms is not to be expected.

Additional information

Other ecotoxicological advice:
Do not release untreated into natural waters.

13. Disposal considerations

Must be dumped or incinerated in accordance with local regulations.
A waste code in accordance with the European waste catalog (EWC) cannot be specified, due to dependence on the usage.

Contaminated packaging:
Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

14. Transport information

Land transport

ADR

Not classified as a dangerous good under transport regulations

RID

Not classified as a dangerous good under transport regulations

Inland waterway transport
ADNR

Not classified as a dangerous good under transport regulations

Sea transport
IMDG

Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory information

Regulations of the European union (Labelling) / National legislation/Regulations

EC-Number: 431-890-2

as in Annex VI of Directive 67/548/EEC:

The product does not require a hazard warning label in accordance with EC Directives.

Other regulations

16. Other information

Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.