



1400 N. Providence Road, Suite 302
Media, PA 19063
Tel: 484-234-5030
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For Chemical Emergency - Spill, Leak, Fire,
Exposure or Accident

Call CHEMTREC Day or Night USA + Canada =
1-800-424-9300 / 703-527-3887

Everchem DINCH

Safety Data Sheet

1. Chemical product and company identification

Structural formula: 1,2-Cyclohexanedicarboxylic acid, di-isononyl ester

CAS. NO.: 166412-78-8

Chemical family: adicarboxylic acid esters

2. Hazard identification

Emergency overview

INGESTION MAY CAUSE GASTRIC DISTURBANCES.

Prolonged or repeated contact may cause mild skin irritation.

Wear a NIOSH-certified (or equivalent) organic vapour respirator.

Avoid inhalation of mists/vapours.

Wear safety glasses with side-shields.

Wear chemical resistant protective gloves.

Wear protective clothing.

Avoid contact with the skin, eyes and clothing.

State of matter: liquid

Colour: colourless

Odour: almost odourless

Potential health effects

Acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Irritation / corrosion:

May cause slight irritation to the skin. Not irritating to the eyes.

Assessment other acute effects:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Sensitization:

Skin sensitizing effects were not observed in animal studies.

Chronic toxicity:

Carcinogenicity:

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

Repeated dose toxicity:

Effects on the kidney of male rats were detected after repeated exposure. These effects are specific for the male rat and are known to be of no relevance to humans.

Reproductive toxicity:

The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity:



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

Genotoxicity:

No mutagenic effect was found in various tests with bacteria, microorganisms and mammalian cell culture. The substance was not mutagenic in studies with mammals.

Signs and symptoms of overexposure:

No significant symptoms are expected due to the non-classification of the product. No hazards anticipated.

Potential environmental effects

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.

3. Composition / Information on Ingredients

Not WHMIS controlled.

4. First-Aid Measures General advice:

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air. Assist in breathing if necessary. Consult a physician.

If on skin:

Wash affected areas thoroughly with soap and water. Remove contaminated clothing. If irritation develops, seek medical attention.

If in eyes:

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required.

If swallowed:

Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

Note to physician

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Flash point: 224 °C (Directive 92/69/EEC, A.9, closed cup) When exposed to high temperatures over a long period of time, formation of outgassing flammable decomposition products may occur.

Autoignition: 330 °C (Directive 92/69/EEC, A.15)

Lower explosion limit: (expert judgement) As a consequence of the thermal decomposition



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behavior (see Thermal decomposition) it is not possible to determine meaningful figures expressed in units of volume- % when applying the standard DIN EN 1839 for determination of the lower explosion limit. Based on a theoretical assessment, it can be assumed that the vapours and decomposition products released from this liquid may form explosible mixtures upon mixing with air at concentrations ≥ 40 g/Nm³ (temperature of mixture 20°C) or ≥ 33 g/Nm³ (temperature of mixture 200°C). (approx. 170 °C, approx. 1013 hPa) (DIN EN 15794, air) The lower explosion point of the substance/mixture has been determined. The explosion point describes the temperature of a flammable liquid at which the concentration of the saturated vapour mixed with air equals the lower explosion limit. As a consequence of the thermal decomposition behaviour (see Thermal decomposition) the determination of the lower explosion point according to standard DIN EN 15794 does not generate a globally meaningful value.

Upper explosion limit:

As a consequence of the thermal decomposition behavior (see Thermal decomposition) it is not possible to determine the upper explosion limit according to standard DIN EN 1839.

Flammability:

not readily ignited

Self-ignition temperature:

(other) The substance does not initiate an exothermic reaction under test conditions. not self-igniting

Suitable extinguishing media:

carbon dioxide, dry powder, water spray, foam

Hazards during fire-fighting:

The product is combustible. Cool endangered containers with water-spray.

Protective equipment for fire-fighting:

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:

Discharge into the environment must be avoided.

Cleanup:

Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

7. Handling and Storage



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Handling

General advice:

Ensure thorough ventilation of stores and work areas.

Storage

General advice:

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

Eye protection:

Tightly fitting safety goggles (chemical goggles). 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. Wash soiled clothing immediately

9. Physical and Chemical Properties

Form :	liquid(25°C, 1atm)
Color :	transparent to slightly color.
Odor :	Sightly irritative order.
pH value	approximate 7
Boiling point range	240-250 °C
Decompose temperature	Not detected
Flash point :	224 °C (closed cup)
Autoignition temperature	Not detected.
Vapor Pressure :	9.75×10 ⁻⁷ mmHg @25°C
Vapor Density :	Not detected.
Freezing Point :	-
Density	approximate 0.950 g/ml (at 25 °C)
Solubility in water :	0.005 G/100 ML

10. Stability and reactivity

Conditions to avoid:

No special precautions other than good housekeeping of chemicals.

Substances to avoid:



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strong oxidizing agents

Hazardous reactions:

Reacts with strong oxidizing agents. No hazardous reactions if stored and handled as prescribed/indicated.

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

When exposed to high temperatures over a long period of time, formation of outgassing flammable decomposition products may occur.

Corrosion to metals:

No corrosive effect on metal.

Oxidizing properties:

not fire-propagating (other) Stability:

11. Toxicological information

Acute toxicity

Oral:

Type of value: LD50

Species: rat

Value: > 5,000 mg/kg (OECD Guideline 423)

Dermal:

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg (OECD Guideline 402)

Irritation / corrosion

Skin:

Species: rabbit

Result: non-irritant

Method: OECD Guideline 404

Eye:

Species: rabbit

Result: non-irritant

Method: OECD Guideline 405

Sensitization:

Guinea pig maximization test

Species: guinea pig

Result: Non-sensitizing.

Method: OECD Guideline 406

Aspiration Hazard:



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not applicable

12. Ecological information

Fish

Acute:

OECD 203; ISO 7346; 84/449/EEC, C.1 static

Brachydanio rerio/LC50 (96 h): > 100 mg/l

Tested above maximum solubility. The details of the toxic effect relate to the nominal concentration.

Aquatic invertebrates

Acute:

OECD Guideline 202, part 1 static

Daphnia magna/EC50 (48 h): > 100 mg/l

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.

Chronic:

OECD Guideline 211 semistatic Daphnia magna (NOEC) 21 d \geq 0.021 mg/l

The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested. Limit concentration test only (LIMIT test).

Aquatic plants

Toxicity to aquatic plants:

OECD Guideline 201 static

green algae/EC50 (72 h): > 100 mg/l

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

Toxicity to microorganisms:

DIN EN ISO 8192-OECD 209-88/302/EEC, P. C aquatic

aerobic bacteria from a domestic water treatment plant/EC20 (180 min): > 1,000 mg/l

Plant

Toxicity to terrestrial plants:

OECD Guideline 208 oat/No observed effect concentration (20 d): > 1,000 mg/kg

OECD Guideline 208 rape/No observed effect concentration (21 d): > 1,000 mg/kg

OECD Guideline 208 vetch/No observed effect concentration (21 d): > 1,000 mg/kg

Soil living organisms

Toxicity to soil dwelling organisms:

OECD Guideline 207 artificial soil

Eisenia foetida/LC50 (14 d): > 1,000 mg/kg

The details of the toxic effect relate to the nominal concentration.

Degradability / Persistence

Biological / Abiological Degradation

Test method: OECD 301B; ISO 9439; 92/69/EEC, C.4-C (aerobic),

Method of analysis: CO₂ formation relative to the theoretical value

Degree of elimination: 90 - 100 % (60 d)

Test method: OECD 301B; ISO 9439; 92/69/EEC, C.4-C (aerobic), activated sludge, domestic,



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adapted

Method of analysis: CO₂ formation relative to the theoretical value

Degree of elimination: 70 - 80 % (28 d)

Evaluation: Biodegradable.

Not readily biodegradable (by OECD criteria).

Bioaccumulation

OECD Guideline 305 E

zebra fish (30 d) Bioconcentration factor 189

Accumulation in organisms is not to be expected.

Environmental mobility:

Transport between environmental compartments:

OECD Guideline 121 Adsorption/water - soil

log KOC: 6.59

Adsorption to solid soil phase is expected.

Other adverse effects:

Do not release untreated into natural waters

13. Disposal considerations

Waste disposal of substance:

Must be disposed of 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.

Container disposal:

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

TDG 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

Federal Regulations

Registration status:

Chemical DSL, CA released / listed

Not WHMIS controlled.

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.



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16. Other Information

Recommended use: for industrial use only