ChemicalBook

Chemical Safety Data Sheet MSDS / SDS

DIAZINON (DIETHYL-D10)

Revision Date:2026-05-31 Revision Number:1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product name	: DIAZINON (DIETHYL-D10)
CBnumber	: CB6682660
CAS	: 100155-47-3
Synonyms	: DIAZINON D10

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	: For R&D use only. Not for medicinal, household or other use.
Uses advised against	: none

Company Identification

Company	: Chemicalbook
Address	: Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing
Telephone	: 010-86108875

SECTION 2: Hazards identification

GHS Label elements, including precautionary statements

Symbol(GHS)

Signal word Warning

Precautionary statements

P501 Dispose of contents/container to.....

P391 Collect spillage. Hazardous to the aquatic environment

P301+P312 IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.

P273 Avoid release to the environment.

P270 Do not eat, drink or smoke when using this product.

P264 Wash skin thouroughly after handling.

Hazard statements

H410 Very toxic to aquatic life with long lasting effects

H302 Harmful if swallowed

SECTION 3: Composition/information on ingredients

Substance

Product name	: DIAZINON (DIETHYL-D10)
Synonyms	: DIAZINON D10
CAS	: 100155-47-3
MF	: C12H11D10N2O3PS
MW	: 314.41

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately.

In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

4.4 Notes to physician

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NOx)

Sulfur oxides

Oxides of phosphorus

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g.

Chemizorb®). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Storage stabilityRecommended storage temperature

2 - 8 °C

Handle and store under inert gas.

Storage class

Storage class (TRGS 510): 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

['Component', 'CAS-No.', 'Value', 'Control parameters', 'Basis']	['Diazinon-diethyl- d10', '100155-47-3', 'TWA', '0.01 mg/m3', 'USA. ACGIH Threshold Limit Values (TLV)']	['', 'Remarks', 'Not classifiable as a human carcinogen Danger of cutaneous absorption', None, None]	['', '', 'TWA', '0.1 mg/m3', 'USA. NIOSH Recommended Exposure Limits']	['', '', 'Potential for dermal absorption', None, None]
['', '', 'Skin']				

PEL 0.1 mg/m3 California permissible exposure limits for chemical contaminants (Title 8, Article 107)

Biological occupational exposure limits

['Component', 'CAS-No.', 'Parameters', 'Value', 'Biological specimen', 'Basis']	['Diazinon-diethyl- d10', '100155- 47-3', 'cholinestera se activity (correction value)', '', 'total blood', 'China. Biological Occupational Exposure Indices']	['', 'Remarks', 'Any time within three-month exposure', None, None, None]	['', '', 'cholinestera se activity (correction value)', '', 'total blood', 'China. Biological Occupational Exposure Indices']	['', '', 'Any time after three-month exposure', None, None, None]

8.2 Exposure controls

Appropriate engineering controls

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection

required

Body Protection

protective clothing

Respiratory protection

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

Information on basic physicochemical properties

a) Physical state	liquid
b) Color	Colourless to Pale Yellow
c) Odor	No data available
d) Melting point/freezing point	No data available
e) Initial boiling point and boiling range	83 - 84 °C at 0.003 hPa - lit. 83 - 84 °C at 0.00267 hPa - lit.
f) Flammability (solid, gas)	No data available
g) Upper/lower flammability or explosive limits	No data available
h) Flash point	112.8 °C - closed cup
i) Autoignition temperature	No data available
j) Decomposition temperature	No data available
k) pH	No data available
l) Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
m) Water solubility	No data available
n) Partition coefficient n-octanol/water	log Pow: 3.3 - Bioaccumulation is not expected.
o) Vapor pressure	< 0.001 hPa at 25 °C
p) Density	1.152 g/mL at 25 °C 1.152 g/cm3 at 25 °C
Relative density	1.152 g/mL at 25 °C
q) Relative vapor density	No data available
r) Particle characteristics	No data available
s) Explosive properties	No data available
t) Oxidizing properties	none
Solubility	Acetonitrile (Slightly), Methanol (Slightly)

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

Stable

10.2 Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

10.3 Conditions to avoid

Avoid moisture. Hygroscopic.

Strong heating.

10.4 Incompatible materials

No data available

10.5 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 66 mg/kg

Remarks: (RTECS)

The value is given in analogy to the following substances: Diazinon

LC50 Inhalation - Rat - 4 h - > 5,400 mg/m3 - dust/mist

Remarks: (IUCLID)

The value is given in analogy to the following substances: Diazinon

LD50 Dermal - Rabbit - > 2,020 mg/kg

Remarks: The value is given in analogy to the following substances: Diazinon

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation

Remarks: (IUCLID)

The value is given in analogy to the following substances: Diazinon

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

Remarks: (IUCLID)

The value is given in analogy to the following substances: Diazinon

Respiratory or skin sensitization

Will not occur

Germ cell mutagenicity

Classified based on available data. For more details, see section 2

Carcinogenicity

Classified based on available data. For more details, see section 2

Reproductive toxicity

Classified based on available data. For more details, see section 2

Specific target organ toxicity - single exposure

Classified based on available data. For more details, see section 2

Specific target organ toxicity - repeated exposure

Classified based on available data. For more details, see section 2

Aspiration hazard

Classified based on available data. For more details, see section 2

11.2 Additional Information

Cholinesterase inhibitors can cause heavy salivation and secretion in the lungs, lachrymation, blurred vision, involuntary defecation, diarrhea, tremor, ataxia, sweating, hypothermia, lowered heart rate, and/or a fall in blood pressure as a result of their action at cholinergic nerve sites., Headache, Nausea, Vomiting, Dizziness, Drowsiness, Confusion.,

Weakness, Muscle cramps/spasms., Change in pupil size., Fever, Seizures., Incoordination.,

Convulsions, Coma.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish LC50 - Lepomis macrochirus (Bluegill) - 0.136 mg/l - 96 h

Remarks: (Lit.)

The value is given in analogy to the following substances: Diazinon

Toxicity to daphnia NOEC - Daphnia magna (Water flea) - 0.001 mg/l - 48 h and other aquatic Remarks: (ECOTOX Database) invertebrates

The value is given in analogy to the following substances: Diazinon

EC50 - Daphnia magna (Water flea) - 0.7 µg/l - 48 h

Remarks: (ECOTOX Database)

The value is given in analogy to the following substances: Diazinon

Toxicity to NOEC - Lepomis macrochirus - 0.022 mg/l - 70 d fish(Chronic toxicity) Remarks: (ECOTOX Database)

The value is given in analogy to the following substances: Diazinon

Toxicity to daphnia LOEC - Daphnia magna (Water flea) - 0.18 µg/l - 21 d and other aquatic Remarks: (ECOTOX Database)

invertebrates(Chronic The value is given in analogy to the following substances: Diazinon toxicity)

NOEC - Daphnia magna (Water flea) - 0.15 µg/l - 21 d

Remarks: (ECOTOX Database)

The value is given in analogy to the following substances: Diazinon

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Bioaccumulation Cyprinus carpio (Carp) - 14 d - 18 µg/l(Diazinon-diethyl-d10)

Bioconcentration factor (BCF): 120

Remarks: The value is given in analogy to the following substances:

Diazinon

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

SECTION 14: Transport information

14.1 UN number

ADR/RID: 2811

IMDG: 2811

IATA-DGR: 2811

14.2 UN proper shipping name

ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (Diazinon-diethyl-d10)

IMDG: TOXIC SOLID, ORGANIC, N.O.S. (Diazinon-diethyl-d10)

IATA-DGR: Toxic solid, organic, n.o.s. (Diazinon-diethyl-d10)

14.3 Transport hazard class(es)

ADR/RID: 6.1

IMDG: 6.1

IATA-DGR: 6.1

14.4 Packaging group

ADR/RID: III

IMDG: III

IATA-DGR: III

14.5 Environmental hazards

ADR/RID: yes

IMDG Marine pollutant: no

IATA-DGR: no

14.6 Special precautions for user

Based on chemical properties, choose appropriate tools and conditions of transport.

Transporting tools shall be equipped with appropriate and sufficient firefighting equipment and emergency leaking installations. If transporting by road, please go along the specified route.

14.7 Incompatible materials

SECTION 15: Regulatory information

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

National regulatory information

Law on the Prevention and Control of Occupational Diseases

Measures on the Environmental Administration of New Chemical Substances Registration

Registration/Notification number : B1A222224945

Downstream users need to comply with the conditions of safe use of the chemical, understand the environmental and health hazard and risk management measures identified on the SDS as well as the local/national regulations concerning the chemical.

Other regulations

Please pay attention on the waste treatment should also comply with local regulations requirement.

SECTION 16: Other information

Abbreviations and acronyms

CAS: Chemical Abstracts Service

TWA: Time-Weighted Average

STEL: Short-Term Exposure Limit

LD50: Lethal Dose 50%

LC50: Lethal Concentration 50%

EC50: Effective Concentration 50%

PEL: Permissible Exposure Limit

TLV: Threshold Limit Value

IMDG: International Maritime Dangerous Goods Code

IATA: International Air Transport Association

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

DOT: US Department of Transportation

NFPA: National Fire Protection Association

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety and Health Administration