# Chemical Safety Data Sheet MSDS / SDS

# **1,6-DIIODOHEXANE**

Revision Date:2025-07-05 Revision Number:1

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

### **Product identifier**

Product name	: 1,6-DIIODOHEXANE				
CBnumber	: CB9267826				
CAS	: 629-09-4				
EINECS Number	: 211-073-5				
Synonyms	: 1,6-diiodohexane				
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.				
Relevant identified uses Uses advised against	: For R&D use only. Not for medicinal, household or other use. : none				
Uses advised against					
Uses advised against Company Identification	: none				

# SECTION 2: Hazards identification

### GHS Label elements, including precautionary statements

Symbol(GHS)

Telephone



Signal word

Warning

: 010-86108875

#### Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P264 Wash skin thouroughly after handling.

P337+P313 IF eye irritation persists: Get medical advice/attention.

P332+P313 IF SKIN irritation occurs: Get medical advice/attention.

P321 Specific treatment (see ... on this label).

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continuerinsing.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Hazard statements

### SECTION 3: Composition/information on ingredients

### Substance

Product name	: 1,6-DIIODOHEXANE
Synonyms	: 1,6-diiodohexane
CAS	: 629-09-4
EC number	: 211-073-5
MF	: C6H12I2
MW	: 337.97

### SECTION 4: First aid measures

### 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. Call in ophthalmologist. Remove contact lenses.

### If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

### Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### Indication of any immediate medical attention and special treatment needed

No data available

### **SECTION 5: Firefighting measures**

### **Extinguishing media**

### Unsuitable extinguishing media

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

### Special hazards arising from the substance or mixture

Carbon oxides Hydrogen iodide

Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating.

Combustible.

### 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.

### **Further information**

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

### **NFPA 704**

2	0	0
HEALTH	2	Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury (e.g. <u>diethyl</u> <u>ether</u> , ammonium phosphate, iodine)
FIRE	0	Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand. Materials that will not burn in air when exposed to a temperature of 820 °C (1,500 °F) for a period of 5 minutes.(e.g. Carbon tetrachloride)
REACT	0	Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium, <u>N2</u> )
SPEC. HAZ.		

### SECTION 6: Accidental release measures

### 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.

### **Environmental precautions**

Do not let product enter drains.

### 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 with liquid-absorbent material (e.g. Chemizorb?). Dispose of properly. Clean up affected area.

### **Reference to other sections**

For disposal see section 13.

### SECTION 7: Handling and storage

### Precautions for safe handling

For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

### Storage conditions

Tightly closed.

Light sensitive.

### Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

### SECTION 8: Exposure controls/personal protection

### control parameter

### Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

### **Exposure controls**

#### 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

Gloves must be inspected prior to use. Full contact

#### Material: Viton? Minimum layer thickness:

Break through time: 480 min Material tested:KCL 890 Vitoject?

Gloves must be inspected prior to use. Splash contact

Material: Nitrile rubber Minimum layer thickness:

Break through time: 10 min

Material tested:Camatril? (KCL 730 / Aldrich Z677442, Size M)

**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.

### Recommended Filter type: Filter type ABEK

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains.

### SECTION 9: Physical and chemical properties

### Information on basic physicochemical properties

Appearance	light yellow liquid
Odour	No data available
Odour Threshold	No data available
рН	No data available
Melting point/freezing point	Melting point/range: 9 - 10 °C - lit.
Initial boiling point and boiling range	141 - 142 °C at 13 hPa - lit.
Flash point	113 °C - closed cup
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive	No data available
limits	
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Explosive properties	No data available
Oxidizing properties	No data available

### Other safety information

No data available

### SECTION 10: Stability and reactivity

### Reactivity

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

### **Chemical stability**

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

### Possibility of hazardous reactions

No data available

Conditions to avoid

Strong heating.

### Incompatible materials

Strong oxidizing agents, Strong bases

### Hazardous decomposition products

In the event of fire: see section 5

### SECTION 11: Toxicological information

# Acute toxicity No data available Skin corrosion/irritation

Information on toxicological effects

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

#### Carcinogenicity

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

### **Reproductive toxicity**

No data available

#### Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

#### Specific target organ toxicity - repeated exposure

No data available

### Aspiration hazard

No data available

### **SECTION 12: Ecological information**

No data available

### Persistence and degradability

No data available

### **Bioaccumulative potential**

No data available

### Mobility in soil

No data available

### Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### Other adverse effects

No data available

### SECTION 13: Disposal considerations

### Waste treatment methods

### Product

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

### **SECTION 14: Transport information**

### **UN number**

### ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

Special precautions for user	
Environmental hazards 14.5 ADR/RID: no IMDG Marine pollutant: no	IATA: no
Packaging group 14.4 ADR/RID: - IMDG: -	IATA: -
Transport hazard class(es) 14.3 ADR/RID: - IMDG: -	IATA: -

### Further information

Not classified as dangerous in the meaning of transport regulations.

# SECTION 15: Regulatory information

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

Regulations on the Safety Management of Hazardous Chemicals China Catalog of Hazardous chemicals 2015:Not Listed. website: https://www.mem.gov.cn/ Measures for Environmental Management of New Chemical Substances EC Inventory:Listed. European Inventory of Existing Commercial Chemical Substances (EINECS):Listed. website: https://echa.europa.eu/ United States Toxic Substances Control Act (TSCA) Inventory:Listed. website: https://www.epa.gov/ Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Not Listed. website: https://www.mee.gov.cn/ Korea Existing Chemicals List (KECL):Not Listed. website: https://ncis.nier.go.kr New Zealand Inventory of Chemicals (NZIoC):Not Listed. website: https://www.epa.govt.nz/ Philippines Inventory of Chemicals and Chemical Substances (PICCS):Not Listed. website: https://emb.gov.ph/ Vietnam National Chemical Inventory:Not Listed. website: https://chemicaldata.gov.vn/

### **SECTION 16: Other information**

### Abbreviations and acronyms

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

- CAS: Chemical Abstracts Service
- EC50: Effective Concentration 50%
- IATA: International Air Transportation Association
- IMDG: International Maritime Dangerous Goods
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- STEL: Short term exposure limit
- TWA: Time Weighted Average

### References

- [1] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
- [2] ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
- [3] ECHA European Chemicals Agency, website: https://echa.europa.eu/
- [4] eChemPortal The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en

- [5] ERG Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- [6] Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- [7] HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- [8] IARC International Agency for Research on Cancer, website: http://www.iarc.fr/
- [9] IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- [10] Sigma-Aldrich, website: https://www.sigmaaldrich.com/

### Disclaimer:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.