

# SAFETY DATA SHEET

Version 6.11 Revision Date 09/08/2024 Print Date 09/09/2024

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

#### 1.1 Product identifiers

Product name : DIC

Product Number : D125407 Brand : Aldrich CAS-No. : 693-13-0

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

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption

(40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by

MilliporeSigma.

## 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.

3050 SPRUCE ST ST. LOUIS MO 63103 UNITED STATES

Telephone : +1 314 771-5765 Fax : +1 800 325-5052

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-

527-3887 CHEMTREC (International) 24

Hours/day; 7 Days/week

## **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

## GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 3), H226 Acute toxicity, Inhalation (Category 1), H330 Serious eye damage (Category 1), H318 Respiratory sensitization (Category 1), H334

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Skin sensitization (Category 1), H317

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 2.2 GHS Label elements, including precautionary statements

	<b>5</b> .
Pictogram	
Signal Word	Danger
Hazard Statements H226 H317 H318 H330 H334	Flammable liquid and vapor. May cause an allergic skin reaction. Causes serious eye damage. Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Precautionary Statements	
P210	Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 P243	Use only non-sparking tools.  Take precautionary measures against static discharge.
P260	Do not breathe mist or vapors.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear protective gloves/ eye protection/ face protection.
P284	Wear respiratory protection.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

plant.

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# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Synonyms : DIC

Formula :  $C_7H_{14}N_2$  Molecular weight : 126.20 g/mol CAS-No. : 693-13-0 EC-No. : 211-743-7

Component	Classification	Concentration	
N,N'-diisopropylcarbodiimide			
	Flam. Liq. 3; Acute Tox. 1; Eye Dam. 1; Resp. Sens. 1; Skin Sens. 1; H226, H330, H318, H334, H317	<= 100 %	

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### **SECTION 4: First aid measures**

#### 4.1 Description of first-aid measures

#### **General advice**

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

#### In case of skin contact

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

#### In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

# If swallowed

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

# 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 2.2) and/or in section 11

# 4.3 Indication of any immediate medical attention and special treatment needed No data available

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

## 5.1 Extinguishing media

# Suitable extinguishing media

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)

Flash back possible over considerable distance.

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air at elevated temperatures.

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.

#### **5.4** Further information

Remove container from danger zone and cool with water. 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. Keep away from heat and sources of ignition. 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. Risk of explosion.

# 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

# Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

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# Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

#### **Hygiene measures**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

## Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons.

Store under inert gas. Moisture sensitive.

# Storage class

Storage class (TRGS 510): 3: Flammable liquids

# 7.3 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**

## 8.1 Control parameters

# Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

## 8.2 Exposure controls

# **Appropriate engineering controls**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face 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). Tightly fitting safety goggles

# Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de).

Splash contact

Material: butyl-rubber

Minimum layer thickness: 0.7 mm Break through time: 10 min

Material tested:Butoject® (KCL 898)

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#### **Body Protection**

Flame retardant antistatic protective clothing.

# **Respiratory protection**

Recommended Filter type: Respirator.

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.

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. Risk of explosion.

# **SECTION 9: Physical and chemical properties**

# Information on basic physical and chemical properties

a) Appearance Form: liquid

Color: colorless, light yellow

b) Odor No data available c) Odor Threshold No data available No data available d) pH e) Melting No data available

point/freezing point

145 - 148 °C 293 - 298 °F - lit.

Initial boiling point and boiling range

33 °C (91 °F) q) Flash point

No data available h) Evaporation rate No data available

Flammability (solid, i)

gas)

Upper/lower No data available

flammability or explosive limits

k) Vapor pressure No data available Vapor density No data available

0.815 g/cm3 at 20 °C (68 °F) - lit. m) Density

No data available Relative density n) Water solubility No data available o) Partition coefficient: No data available

n-octanol/water

No data available p) Autoignition

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temperature

q) Decomposition No data available temperature

r) Viscosity No data available

s) Explosive properties Not classified as explosive.

t) Oxidizing properties none

# 9.2 Other safety information

No data available

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Vapor/air-mixtures are explosive at intense warming.

## 10.2 Chemical stability

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

# 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

Exposure to moisture. Heating.

# 10.5 Incompatible materials

No data available

# 10.6 Hazardous decomposition products

In the event of fire: see section 5

## **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects

#### **Acute toxicity**

Symptoms: Nausea, Vomiting, Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

LC50 Inhalation - Rat - 4 h - 0.1 mg/l - vapor

Remarks: (External MSDS)

Symptoms: Possible damages:, mucosal irritations

Inhalation: Rapid absorption. Dermal: No data available

**Skin corrosion/irritation**Remarks: Possible damages:

slight irritation

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# Serious eye damage/eye irritation

No data available

# Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

Test Type: Mutagenicity (mammal cell test):

Result: positive Remarks: (Lit.) Test Type: Ames test Result: negative Remarks: (Lit.)

## 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.

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

identified as a known or anticipated carcinogen by NTP.

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

on OSHA's list of regulated carcinogens.

# **Reproductive toxicity**

No data available

# Specific target organ toxicity - single exposure

No data available

## Specific target organ toxicity - repeated exposure

No data available

## Aspiration hazard

No data available

#### 11.2 Additional Information

RTECS: FF2175000

Damage to the eyes., Nausea, Headache, Vomiting, Causes severe corneal edema. Temporary blindness has been reported., Symptoms may be delayed., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

After absorption:

Headache

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

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## **SECTION 12: Ecological information**

#### 12.1 Toxicity

No data available

# 12.2 Persistence and degradability

No data available

# 12.3 Bioaccumulative potential

No data available

#### 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

Discharge into the environment must be avoided.

# **SECTION 13: Disposal considerations**

## 13.1 Waste treatment methods

#### **Product**

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## **SECTION 14: Transport information**

# DOT (US)

UN number: 3384 Class: 6.1I (3) Packing group: I

Proper shipping name: Toxic by inhalation liquid, flammable, n.o.s. (N,N'-

diisopropylcarbodiimide) Reportable Quantity (RQ):

Poison Inhalation Hazard: Hazard Zone B

# **IMDG**

UN number: 3384 Class: 6.1 (3) Packing group: I EMS-No: F-E, S-D Proper shipping name: TOXIC BY INHALATION LIQUID, FLAMMABLE, N.O.S. (N,N'-

diisopropylcarbodiimide)

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#### **IATA**

UN number: 3384 Class: 6.1 (3)

Proper shipping name: Toxic by inhalation liquid, flammable, n.o.s. (N,N'-

diisopropylcarbodiimide)

IATA Passenger: Not permitted for transport IATA Cargo: Not permitted for transport

# **SECTION 15: Regulatory information**

# **CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

# **SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

# **SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312

: Acute Health Hazard

Hazards

Chronic Health Hazard

SARA 313 : This material does not contain any chemical

components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by

SARA Title III, Section 313.

## **US State Regulations**

## **Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

## **Maine Chemicals of High Concern**

Product does not contain any listed chemicals

## **Vermont Chemicals of High Concern**

Product does not contain any listed chemicals

## **Washington Chemicals of High Concern**

Product does not contain any listed chemicals

#### The ingredients of this product are reported in the following inventories:

TSCA : All substances listed as active on the TSCA inventory

## **TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

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## **SECTION 16: Other information**

#### **Further information**

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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