

14078 Meridian Parkway, Riverside, CA. 92518

# SAFETY DATA SHEET

Version: v1

Revision Date: 2024-01-20

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

#### 1.1 Product identifiers

Product name : 4-Nitrobenzyl chloroformate

Product Number : N111115
Brand : aladdin
CAS-No. : 4457-32-3

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

Identified uses : Laboratory chemicals, Manufacture of substances.

1.3 Company

Company : ALADDIN SCIENTIFIC CORPORATION

Address : 14078 Meridian Parkway,

Riverside, CA. 92518

Telephone : +1 (833) 552-7181 Fax : no data available

# 1.4 Emergency telephone number

CHEMTREC®, Inside the USA : 1-800-424-9300

CHEMTREC®. Outside the USA :

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

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

# 2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word Dange

Hazard statement(s)

H314 Causes severe skin burns and eye damage

Precautionary statement(s)

P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash hands [and ...] thoroughly after handling.

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

P302 IF ON SKIN:

P361 Take off immediately all contaminated clothing.



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P363 Wash contaminated clothing before reuse.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses if present and easy to do - continue rinsing.

P405 Store locked up.

P501 Dispose of contents/container to an approved waste disposal plant.

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

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

#### 3.1 Substances

Synonyms : Chloroformic Acid 4-Nitrobenzyl Ester;4-Nitrocarbobenzoxychloride ;4-

Nitrobenzyl Chlorocarbonate

Formula : C8H6CINO4

Molecular weight : 215.59

CAS No. : 4457-32-3

EC-NO. : 224-708-6

Component	Classification	Concentration
4-Nitrobenzyl chloroformate		
	no data available	97%

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

# 4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area If inhaled

If breathed in, move person into fresh air.If not breathing, give artificial respiration.Consult a physician In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician. In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

no data available



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

no data available

# **SECTION 5: Firefighting measures**

# 5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

no data available

# 5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions.- Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas

# 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### 5.4 Further information

no data available

#### SECTION 6: Accidental release measures

# 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust

#### 6.2 Environmental precautions

Do not let product enter drains.

# 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

no data available

# **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

# 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: 2 - 8 °C



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hygroscopic Vent periodically. Over time, pressure may increase causing containers to burst Handle and open container with care. Moisture sensitive. Keep in a dry place.

# 7.3 Specific end use(s)

no data available

#### SECTION 8: Exposure controls/personal protection

# 8.1 Control parameters

# 8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

Personal protective equipment

Eye/face protection

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

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection** 

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

no data available

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

#### 9.1 Information on basic physical and chemical properties

a) Appearance form: powder color: light yellow

b) Odour no data available c) Odour Threshold no data available d) pH no data available

e) Melting point/freezing point 32 - 34 °C (90 - 93 °F) - lit.

f) Initial boiling point and boiling range no data available

g) Flash point 113 °C (235 °F) - closed cup

h) Evaporation rate no data available



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i) Flammability (solid, gas) no data available

j) Upper/lower flammability or

explosive limits no data available k) Vapour pressure no data available no data available I) Vapour density m) Relative density no data available n) Water solubility no data available o) Partition coefficient: n-octanol/water no data available no data available p) Auto-ignition temperature no data available q) Decomposition temperature no data available r) Viscosity s) Explosive properties N no data available t) Oxidizing properties N no data available

# 9.2 Other safety information

no data available

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

no data available

#### 10.2 Chemical stability

Stable under recommended storage conditions.

# 10.3 Possibility of hazardous reactions

no data available

#### 10.4 Conditions to avoid

no data available

#### 10.5 Incompatible materials

acids, Strong bases, Alcohols, Amines

# 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions.- Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas

# **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects

Acute toxicity no data available



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Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

No component 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

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Additional Information

no data available

# **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

no data available

#### 12.6 Other adverse effects

no data available



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#### **SECTION 13:**

# 13.1 Disposal considerations

**Product** 

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber

Contaminated packaging
Dispose of as unused product

# **SECTION 14: Transport information**

DOT (US)

UN number: no data available Packing group: no data available Class: no data available

Proper shipping name: no data Reportable Quantity(RQ): no data Poison Inhalation Hazard: no data

available available available

Environmental Hazards: no data available

**IMDG** 

UN number: no data available Packing group: no data available EMS-No: no data available

Proper shipping name: no data available

IATA

UN number: no data available Packing group: no data available Class: no data available

Proper shipping name: no data available

# **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

Regulatory Affairs

Prepared By ALADDIN SCIENTIFIC CORPORATION

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