# Chemical Safety Data Sheet MSDS / SDS

# **1-AMINONONANE**

Revision Date: 2024-12-21 Revision Number: 1

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

#### **Product identifier**

Product name : 1-AMINONONANE

CBnumber : CB1756805

CAS : 112-20-9

EINECS Number : 203-945-9

Synonyms: nonylamine,N-NONYLAMINE

#### 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 : 400-158-6606

# SECTION 2: Hazards identification

# GHS Label elements, including precautionary statements

Symbol(GHS)



Signal word Danger

## Precautionary statements

P273 Avoid release to the environment.

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

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

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

Continuerinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P405 Store locked up.

#### **Hazard statements**

H227 Combustible liquid

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

H400 Very toxic to aquatic life

H401 Toxic to aquatic life

H411 Toxic to aquatic life with long lasting effects

# SECTION 3: Composition/information on ingredients

#### **Substance**

Product name : 1-AMINONONANE

Synonyms: nonylamine,N-NONYLAMINE

CAS : 112-20-9
EC number : 203-945-9
MF : C9H21N
MW : 143.27

# SECTION 4: First aid measures

# 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. Call in physician.

## In case of skin contact

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

## 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: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

# 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**

#### Suitable extinguishing media

Carbon dioxide (CO2) Foam Dry powder

#### Unsuitable extinguishing media

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

#### Special hazards arising from the substance or mixture

Carbon oxides Nitrogen oxides (NOx) 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.

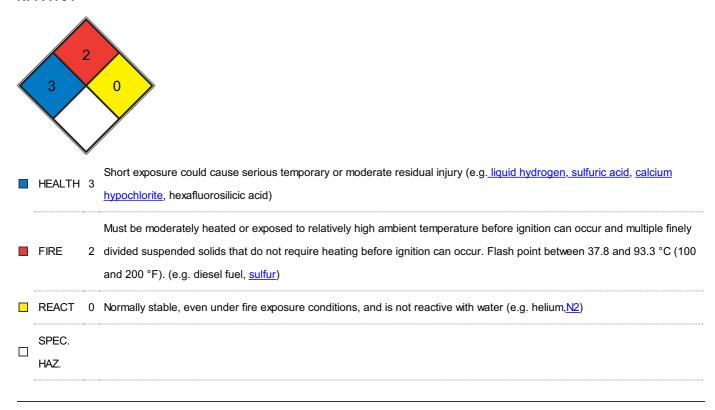
#### Advice for firefighters

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**

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.

#### **NFPA 704**



# 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. Keep away from heat and sources of ignition.

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

#### Advice on safe handling

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

#### 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.

## Conditions for safe storage, including any incompatibilities

# Storage conditions

Tightly closed.

## 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). Tightly fitting safety goggles

**Body Protection** 

protective clothing

Respiratory protection

Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds

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

Odour Threshold No data available  PH >7 (H2O, 20°C)(undiluted)  Melting point/freezing point -1 °C  Initial boiling point and boiling range 201 °C - lit.  Flash point 74 °C - closed cup  Evaporation rate No data available  Flammability (solid, gas) No data available  Upper/lower flammability or explosive No data available  Ilimits  Vapour pressure 0.37 hPa (25 °C)  Vapour density No data available  Relative density 0,782 g/cm3 at 25 °C - lit. No data available  Water solubility No data available  Partition coefficient: n-octanol/water log Pow: 3,22  Autoignition temperature No data available	Appearance	colorless clear, liquid
pH >7 (H2O, 20°C)(undiluted)  Melting point/freezing point -1 °C  Initial boiling point and boiling range 201 °C - lit.  Flash point 74 °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 0.37 hPa (25 °C)  Vapour density No data available  Relative density 0,782 g/cm3 at 25 °C - lit. No data available  Water solubility No data available  Partition coefficient: n-octanol/water log Pow. 3,22  Autoignition temperature No data available	Odour	No data available
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Autoignition temperature No data available	Water solubility	No data available
	Partition coefficient: n-octanol/water	log Pow: 3,22
	Autoignition temperature	No data available
Decomposition temperature No data available	Decomposition temperature	No data available
Viscosity Viscosity, kinematic: No data available Viscosity, dynamic: No data available	Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Explosive properties No data available	Explosive properties	No data available
Oxidizing 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

Violent reactions possible with:

Strong oxidizing agents acid halides

Acid anhydrides acids

Caution! In contact with nitrites, nitrates, nitrous acid possible liberation of nitrosamines!

## Conditions to avoid

Strong heating.

## Incompatible materials

No data available

#### Hazardous decomposition products

In the event of fire: see section 5

# **SECTION 11: Toxicological information**

# Information on toxicological effects

## **Acute toxicity**

LD50 Oral - 500,01 mg/kg Remarks: No data available LC50 Inhalation - 4 h - 11 mg/l LD50 Dermal - 1.100 mg/kg

#### Skin corrosion/irritation

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

No data available

## 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

# **SECTION 12: Ecological information**

## **Toxicity**

#### Toxicity to fish

LC50 - Pimephales promelas (fathead minnow) - 2,16 mg/l - 96 h

#### Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 1,6 mg/l - 48 h

## Toxicity to algae

EC50 - Algae - 0,23 mg/l - 72 h

## 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: 2735 IMDG: 2735 IATA: 2735

# **UN proper shipping name**

ADR/RID: AMINES, LIQUID, CORROSIVE, N.O.S. (nonylamine) IMDG: AMINES, LIQUID, CORROSIVE, N.O.S. (nonylamine)

IATA: Amines, liquid, corrosive, n.o.s. (nonylamine)

# Transport hazard class(es)

ADR/RID: 8 IMDG: 8 IATA: 8

Packaging group

ADR/RID: II IMDG: II IATA: II

**Environmental hazards** 

ADR/RID: yes IMDG Marine pollutant: yes IATA: no

Special precautions for user

No data available

# 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

Vietnam National Chemical Inventory:Listed. website: https://chemicaldata.gov.vn/

Korea Existing Chemicals List (KECL):Listed. website: http://ncis.nier.go.kr

New Zealand Inventory of Chemicals (NZIoC):Listed. website: https://www.epa.govt.nz/

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Listed. website: https://emb.gov.ph/

European Inventory of Existing Commercial Chemical Substances (EINECS):Listed. website: https://echa.europa.eu/

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Not Listed. website: https://www.mee.gov.cn/

United States Toxic Substances Control Act (TSCA) Inventory:Listed. website: https://www.epa.gov/

EC Inventory:Listed.

# **SECTION 16: Other information**

## Abbreviations and acronyms

CAS: Chemical Abstracts Service

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

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

## 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:

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