

# SAFETY DATA SHEET

Creation Date 04-June-2010

Revision Date 18-December-2025

Revision Number 6

This safety data sheet was created pursuant to the requirements of: Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR) - SOR 2022-272

## 1. Identification

**Product Name** n-Octylamine

**Cat No. :** AC129490000; AC129490025; AC129490050; AC129491000;  
AC129495000; AC129490020

**CAS-No** 111-86-4  
**Synonyms** 1-Octanamine

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use.

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

#### Company

##### **Importer/Distributor**

Fisher Scientific  
112 Colonnade Road,  
Ottawa, ON K2E 7L6,  
Canada  
Tel: 1-800-234-7437

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

##### **Manufacturer**

Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

#### **Emergency Telephone Number**

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

## 2. Hazard(s) identification

### Classification

#### **WHMIS 2015 Classification**

This product is hazardous in accordance with the Canada Hazardous Products Act (HPA) and Hazardous Products Regulation (HPR), as amended (SOR/2022-272)

<b>Flammable liquids</b>	Category 3
<b>Acute oral toxicity</b>	Category 3
<b>Acute dermal toxicity</b>	Category 3
<b>Acute Inhalation Toxicity</b>	Category 4
<b>Skin Corrosion/Irritation</b>	Category 1 A
<b>Serious Eye Damage/Eye Irritation</b>	Category 1
<b>Specific target organ toxicity (single exposure)</b>	Category 3
Target Organs - Respiratory system.	

### Label Elements

**Signal Word**

Danger

**Hazard Statements**

Flammable liquid and vapor

Harmful if inhaled

Causes severe skin burns and eye damage

Toxic if swallowed or in contact with skin

May cause respiratory irritation

**Precautionary Statements****Prevention**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Keep container tightly closed

Ground and bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment

Do not breathe dust/fumes/gas/mist/vapours/spray

Use only outdoors or in a well-ventilated area

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

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use non-sparking tools

Take action to prevent static discharges

**Response**

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Immediately call a POISON CENTER/doctor

Do NOT induce vomiting

Rinse mouth

Wash contaminated clothing before reuse

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

**Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other Hazards**

Very toxic to aquatic organisms

Toxic to aquatic life with long lasting effects

### 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
1-Octanamine	111-86-4	>95

### 4. First-aid measures

<b>General Advice</b>	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
<b>Inhalation</b>	If not breathing, give artificial respiration. Remove to fresh air. Immediate medical attention is required. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
<b>Ingestion</b>	Call a physician or poison control center immediately. Do NOT induce vomiting.
<b>Most important symptoms/effects</b>	Causes burns by all exposure routes. Difficulty in breathing. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated
<b>Notes to Physician</b>	Treat symptomatically

## 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	Water spray. Carbon dioxide (CO <sub>2</sub> ). Dry chemical. Chemical foam. Water mist may be used to cool closed containers. CO <sub>2</sub> , dry chemical, dry sand, alcohol-resistant foam.
<b>Unsuitable Extinguishing Media</b>	No information available
<b>Flash Point</b>	60 °C / 140 °F
<b>Method -</b>	No information available
<b>Autoignition Temperature</b>	265 °C / 509 °F
<b>Explosion Limits</b>	
<b>Upper</b>	8.2 Vol%
<b>Lower</b>	1.6 Vol%
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available

### Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes. Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Combustible material. Vapors may travel to source of ignition and flash back. Do not allow run-off from fire-fighting to enter drains or water courses.

### Hazardous Combustion Products

Nitrogen oxides (NO<sub>x</sub>). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

### NFPA

<b>Health</b>	<b>Flammability</b>	<b>Instability</b>	<b>Physical hazards</b>
3	2	0	N/A

**6. Accidental release measures**

<b>Personal Precautions</b>	Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Take precautionary measures against static discharges. Remove all sources of ignition.
<b>Environmental Precautions</b>	Do not flush into surface water or sanitary sewer system. Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.
<b>Methods for Containment and Clean Up</b>	Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

**7. Handling and storage**

<b>Handling</b>	Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Wear personal protective equipment/face protection. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take precautionary measures against static discharges.
<b>Storage.</b>	Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat, sparks and flame. Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Acids. Strong oxidizing agents. Acid anhydrides. Acid chlorides.

**8. Exposure controls / personal protection**

<b>Exposure Guidelines</b>	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
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<b>Engineering Measures</b>	Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting/equipment. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source
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**Personal protective equipment**

<b>Eye Protection</b>	Goggles
<b>Hand Protection</b>	Protective gloves

Glove material	Breakthrough time	Glove thickness	Glove comments
Natural rubber	See manufacturers recommendations	-	Splash protection only
Nitrile rubber			
Neoprene			
PVC			

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

**Respiratory Protection**

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly  
**Recommended Filter type:** Ammonia and organic ammonia derivatives filter Type K Green conforming to EN14387

When RPE is used a face piece Fit Test should be conducted

### Environmental exposure controls

Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

## 9. Physical and chemical properties

### Appearance

#### Physical State

Liquid

#### Color

Colorless

#### Odor

Rotten-egg like

#### Odor Threshold

No information available

### Property

#### Values

#### Remarks

#### Method

#### Melting Point/Range

-1 °C / 30.2 °F

#### Softening Point

No data available

#### Boiling Point/Range

179 °C / 354.2 °F

#### Flash Point

60 °C / 140 °F

#### Flammability (liquid)

Flammable

**Method -** No information available

#### Flammability (solid,gas)

Not applicable

On basis of test data

#### Explosion Limits

**Lower** 1.6

Liquid

**Upper** 8.2

#### Autoignition Temperature

265 °C / 509 °F

#### Decomposition Temperature

300 °C

#### pH

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#### Viscosity

1.39 mPa s at 20 °C

#### Water Solubility

0.2 g/l water (25°C)

practically insoluble

#### Solubility in other solvents

No information available

#### Partition Coefficient (n-octanol/water)

#### Component

#### log Pow

1-Octanamine

3,46

#### Vapor Pressure

1 mbar @ 20 °C

#### Density / Specific Gravity

0.782

#### Bulk Density

Not applicable

Liquid

#### Vapor Density

4.5 (Air = 1.0)

(Air = 1.0)

#### Particle characteristics

Not applicable (liquid)

### Other Information

#### Molecular Formula

C8 H19 N

#### Molecular Weight

129.24

#### Explosive Properties

explosive air/vapour mixtures possible

## 10. Stability and reactivity

### Reactive Hazard

None known, based on information available

<b>Stability</b>	Stable under normal conditions.
<b>Conditions to Avoid</b>	Keep away from open flames, hot surfaces and sources of ignition. Incompatible products.
<b>Incompatible Materials</b>	Acids, Strong oxidizing agents, Acid anhydrides, Acid chlorides
<b>Hazardous Decomposition Products</b>	Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> )
<b>Hazardous Polymerization</b>	No information available.
<b>Hazardous Reactions</b>	None under normal processing.

## 11. Toxicological information

### Information on expected route of exposure

<b>Inhalation</b>	Not an expected route of exposure.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Eyes</b>	Avoid contact with eyes. Corrosive to the eyes and may cause severe damage including blindness.
<b>Skin</b>	Avoid contact with skin. Causes burns. Skin Corrosion/Irritation. Harmful in contact with skin.

### Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
1-Octanamine	< 200 mg/kg (Rat)	200 - 2000 mg/kg (Rabbit)	LC50 = 1.6 mg/L ( Rat ) 4 h

**Toxicologically Synergistic Products** No information available

**(b) skin corrosion/irritation;** Category 1 A

**(c) serious eye damage/irritation;** Category 1

**(d) respiratory or skin sensitization;**  
**Respiratory** Based on available data, the classification criteria are not met  
**Skin** Based on available data, the classification criteria are not met

**(e) germ cell mutagenicity;** Based on available data, the classification criteria are not met  
 Not mutagenic in AMES Test

**(f) carcinogenicity;** Based on available data, the classification criteria are not met  
 The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
1-Octanamine	111-86-4	Not listed	Not listed	Not listed	Not listed	Not listed

**(g) reproductive toxicity;** Based on available data, the classification criteria are not met

**(h) STOT-single exposure;** Category 3

**Results / Target organs** Respiratory system.

(i) STOT-repeated exposure; Based on available data, the classification criteria are not met

Target Organs None known.

(j) aspiration hazard; Based on available data, the classification criteria are not met

**Symptoms / effects, both acute and delayed** Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated.

**Other Adverse Effects** The toxicological properties have not been fully investigated.

**Endocrine Disrupting Properties** This product does not contain any known or suspected endocrine disruptors.

## 12. Ecological information

### Ecotoxicity

The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
1-Octanamine	Not listed	LC50: 4.73 - 5.7 mg/L, 96h flow-through (Pimephales promelas)	Not listed	Not listed

**Persistence and Degradability** Insoluble in water May persist based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Is not likely mobile in the environment due its low water solubility.

Component	log Pow
1-Octanamine	3,46

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

### DOT

UN-No UN2734  
 Proper Shipping Name AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S.  
 Technical Shipping Name 1-Octanamine  
 Hazard Class 8  
 Subsidiary Hazard Class 3  
 Packing Group I

### TDG

UN-No UN2734  
 Proper Shipping Name AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S.  
 Technical Shipping Name 1-Octanamine  
 Hazard Class 8  
 Subsidiary Hazard Class 3  
 Packing Group I

### IATA

UN-No UN2734  
 Proper Shipping Name AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S.  
 Technical Shipping Name 1-Octanamine

<b>Hazard Class</b>	8
<b>Subsidiary Hazard Class</b>	3
<b>Packing Group</b>	I
<b>IMDG/IMO</b>	
<b>UN-No</b>	UN2734
<b>Proper Shipping Name</b>	AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S.
<b>Technical Shipping Name</b>	1-Octanamine
<b>Hazard Class</b>	8
<b>Subsidiary Hazard Class</b>	3
<b>Packing Group</b>	I

## 15. Regulatory information

### International Inventories

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
1-Octanamine	111-86-4	X	-	X	ACTIVE	203-916-0	430-750-8	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
1-Octanamine	111-86-4	X	KE-26611	X	X	X	X	X	X

#### Legend:

X - Listed '-' - Not listed

**KECL** - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**ENCS** - Japanese Existing and New Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

### Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and its amendments and meets the requirements of the HPR (Paragraph 13(1)(a) of the revised Hazardous Products Act (HPA)).

### Other International Regulations

**Authorisation/Restrictions according to EU REACH** Not applicable

**Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?**

Not applicable

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

Component	CAS-No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
1-Octanamine	111-86-4	Listed	Not applicable	Not applicable	Not applicable

Component	CAS-No	Seveso III Directive (2012/18/EC) - Qualifying Quantities	Seveso III Directive (2012/18/EC) - Qualifying Quantities	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)

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		for Major Accident Notification	for Safety Report Requirements		
1-Octanamine	111-86-4	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other information

<b>Prepared By</b>	Product stewardship (Regulatory Affairs) Thermo Fisher Scientific email - begel.sdsdesk@thermofisher.com
<b>Creation Date</b>	04-June-2010
<b>Revision Date</b>	18-December-2025
<b>Print Date</b>	18-December-2025
<b>Revision Summary</b>	This document has been updated to comply with the requirements of WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR) to align with the Globally Harmonised System (GHS) (V7/8) for the Classification and Labelling of Chemicals.

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**