

# **SAFETY DATA SHEET**

Creation Date 07-Oct-2014 Revision Date 02-Mar-2022 Revision Number 4

# 1. Identification

Product Name 1-Ethylpiperidine

Cat No. : A16294

**CAS No** 766-09-6

**Synonyms** No information available

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

# Details of the supplier of the safety data sheet

### Company

Alfa Aesar

Thermo Fisher Scientific Chemicals, Inc.

30 Bond Street

Ward Hill, MA 01835-8099

Tel: 800-343-0660 Fax: 800-322-4757 **Email:** tech@alfa.com

www.alfa.com

**Emergency Telephone Number** 

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660.

After normal business hours, call Carechem 24 at (866) 928-0789.

# 2. Hazard(s) identification

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids

Acute oral toxicity

Category 3

Acute dermal toxicity

Category 4

Acute Inhalation Toxicity - Vapors

Skin Corrosion/Irritation

Serious Eye Damage/Eye Irritation

Specific target organ toxicity (single exposure)

Category 1

Category 3

Category 1

Category 3

Target Organs - Respiratory system.

### Label Elements

# Signal Word

Danger

#### **Hazard Statements**

Highly flammable liquid and vapor Harmful in contact with skin Causes severe skin burns and eye damage May cause respiratory irritation Toxic if swallowed or if inhaled



### **Precautionary Statements**

#### Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

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

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

#### Response

Immediately call a POISON CENTER or doctor/physician

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

#### Skir

Wash contaminated clothing before reuse

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

#### Eyes

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

# Ingestion

Rinse mouth

Do NOT induce vomiting

# Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

#### Storage

Store locked up

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

#### Disposa

Dispose of contents/container to an approved waste disposal plant

### Hazards not otherwise classified (HNOC)

None identified

# 3. Composition/Information on Ingredients

Component	CAS No	Weight %
1-Ethyl piperdine	766-09-6	<=100

### 4. First-aid measures

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention

immediately if symptoms occur.

**Inhalation** Remove to fresh air. Get medical attention immediately if symptoms occur.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Most important symptoms and

effects

None reasonably foreseeable. Inhalation of high vapor concentrations may cause symptoms like 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: Ingestion causes severe swelling, severe

damage to the delicate tissue and danger of perforation

Notes to Physician Treat symptomatically

# 5. Fire-fighting measures

Suitable Extinguishing Media Water mist may be used to cool closed containers. CO 2, dry chemical, dry sand,

alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

**Flash Point** 17 °C / 62.6 °F

Method - No information available

Autoignition Temperature 205 °C / 401 °F

**Explosion Limits** 

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge 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. Vapors may travel to source of ignition and flash back.

#### **Hazardous Combustion Products**

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrogen cyanide (hydrocyanic acid).

#### **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.

NFPA

Health Flammability Instability Physical hazards
0 0 N/A

# 6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust

formation.

**Environmental Precautions** Should not be released into the environment.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

Up

7. Handling and storage

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid

contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

**Storage.** Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

Keep away from heat, sparks and flame. Flammables area. Incompatible Materials. Acids. Bases. Strong oxidizing agents. Alkaline. Acid anhydrides. Acid chlorides. Carbon dioxide

(CO2).

8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure

limitsestablished by the region specific regulatory bodies.

Engineering Measures None under normal use conditions.

Personal Protective Equipment

**Eye/face Protection** Tight sealing safety goggles. Face protection shield.

**Skin and body protection**Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection**No protective equipment is needed under normal use conditions.

**Hygiene Measures**Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State Liquid
Appearance Clear

**Odor** Clear Strong, Amine compounds

Odor Threshold<br/>pHNo information available<br/>12 10 g/L aq.sol

 Melting Point/Range
 -20 °C / -4 °F

 Boiling Point/Range
 129 - 131 °C / 264.2 - 267.8 °F @ 760 mmHg

Flash Point

17 °C / 62.6 °F

Flash Point

18 C / 62.6 °F

Flash Point

19 C / 62.6 °F

Evaporation Rate No information available Flammability (solid,gas) Not applicable

Flammability or explosive limits

Upper No data available
Lower No data available
Vapor Pressure 4.5 mbar @ 20 °C

Vapor Density3.90Specific Gravity0.824

Solubility

Partition coefficient; n-octanol/water

Autoignition Temperature

No information available
No data available
205 °C / 401 °F

**Decomposition Temperature** > 400°C

Viscosity No information available

Molecular Formula C7 H15 N Molecular Weight 113.2

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under normal conditions.

Conditions to Avoid Incompatible products. Excess heat. Keep away from open flames, hot surfaces and

sources of ignition.

Incompatible Materials Acids, Bases, Strong oxidizing agents, Alkaline, Acid anhydrides, Acid chlorides, Carbon

dioxide (CO2)

Hazardous Decomposition Products Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen cyanide

(hydrocyanic acid)

Hazardous Polymerization Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

# 11. Toxicological information

#### **Acute Toxicity**

### **Product Information**

**Component Information** 

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	
1-Ethyl piperdine	280 mg/kg (Rat)	>1000 mg/kg (Rabbit)	2420 mg/m <sup>3</sup> /4h (Rat)	

**Toxicologically Synergistic** 

No information available

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Irritation** Causes burns by all exposure routes

Sensitization No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
1-Ethyl piperdine	766-09-6	Not listed				

Mutagenic Effects Not mutagenic in AMES Test

Reproductive Effects

No information available.

Developmental Effects

No information available.

**Teratogenicity** No information available.

**STOT - single exposure**STOT - repeated exposure
Respiratory system
None known

Aspiration hazard No information available

Symptoms / effects,both acute and Inhalation of high vapor concentrations may cause symptoms like headache, dizziness,

delayed

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: Ingestion causes severe swelling, severe damage to the delicate tissue and

danger of perforation

Endocrine Disruptor Information No information available

#### Other Adverse Effects

The toxicological properties have not been fully investigated.

# 12. Ecological information

#### **Ecotoxicity**

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
1-Ethyl piperdine	Not listed	LC50: 25 mg/L/96h	Not listed	EC50 >100 mg/L/48h
		(Leuciscus idus)		_

Persistence and Degradability Persistence is unlikely

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

Component	log Pow
1-Ethyl piperdine	1.75

# 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 UN2386

Proper Shipping Name 1-ETHYLPIPERIDINE

Hazard Class 3 Subsidiary Hazard Class 8 Packing Group II

TDG

UN-No UN2386

Proper Shipping Name 1-ETHYLPIPERIDINE

Hazard Class 3 Subsidiary Hazard Class 8 Packing Group II

<u>IATA</u>

UN-No UN2386

Proper Shipping Name 1-ETHYLPIPERIDINE

Hazard Class 3 Subsidiary Hazard Class 8 Packing Group II

IMDG/IMO

UN-No UN2386

Proper Shipping Name 1-ETHYLPIPERIDINE

Hazard Class 3 Subsidiary Hazard Class 8 Packing Group II

# 15. Regulatory information

### **United States of America Inventory**

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
1-Ethyl piperdine	766-09-6	Χ	ACTIVE	-

### Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed '-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

TSCA 12(b) - Notices of Export

Not applicable

### **International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

-	Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
	1-Ethyl piperdine	766-09-6	Х	-	212-161-6	Χ	-		Х	Х	-

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

### U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

**OSHA** - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

# U.S. State Right-to-Know

Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
1-Ethyl piperdine	-	X	-	-	-

# **U.S. Department of Transportation**

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade Serious risk, Grade 3

Authorisation/Restrictions according to EU REACH

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-Ethyl piperdine	766-09-6	Not applicable	Not applicable	Not applicable	Not applicable
Component	CAS No	Seveso III Directive (2012/18/EC) -	Seveso III Directive (2012/18/EC) -	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)

Component	CAS No	Seveso III Directive	Seveso III Directive	Rotterdam	Basel Convention
-		(2012/18/EC) -	(2012/18/EC) -	Convention (PIC)	(Hazardous Waste)
		<b>Qualifying Quantities</b>	<b>Qualifying Quantities</b>	, ,	, ,
		for Major Accident	for Safety Report		
		Notification	Requirements		
1-Ethyl piperdine	766-09-6	Not applicable	Not applicable	Not applicable	Not applicable

# 16. Other information

Prepared By Health, Safety and Environmental Department

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**Revision Summary** SDS authoring systems update, replaces ChemGes SDS No. 766-09-6/2.

#### **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**