

# **SAFETY DATA SHEET**

Revision Date 14-August-2023 Revision Number 5

1. Identification

Product Name 2-Ethylhexanoic anhydride

Cat No. : AC424790000; AC424790100

Synonyms No information available

Recommended Use Laboratory chemicals.

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

Acros Organics

One Reagent Lane

Fair Lawn, NJ 07410

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

Manufacturer

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

**Emergency Telephone Number** 

For information **US** call: 001-800-ACROS-01 / **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 Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

Skin Corrosion/IrritationCategory 1 BSerious Eye Damage/Eye IrritationCategory 1Specific target organ toxicity (single exposure)Category 3

Target Organs - Respiratory system.

**Label Elements** 

Signal Word

Danger

**Hazard Statements** 

Causes severe skin burns and eye damage May cause respiratory irritation



## **Precautionary Statements**

#### Prevention

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

Wash face, hands and any exposed skin thoroughly after handling

Use only outdoors or in a well-ventilated area

Wear protective gloves/protective clothing/eve protection/face protection

#### Response

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

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

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

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 Wash contaminated clothing before reuse

#### 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

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
2-Ethylhexanoic anhydride	36765-89-6	95

### 4. First-aid measures

Eye Contact Immediate medical attention is required. Rinse immediately with plenty of water, also under

the eyelids, for at least 15 minutes.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Immediate medical attention is required.

**Inhalation** Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial

respiration. Immediate medical attention is required.

**Ingestion** Do NOT induce vomiting. Call a physician immediately.

Most important symptoms/effects Causes burns by all exposure routes. 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 Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam.

Unsuitable Extinguishing Media No information available

212 °C / 413.6 °F **Flash Point** 

Method -No information available

**Autoignition Temperature** 

**Explosion Limits** 

No information available

Upper No data available No data available Lower

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

#### Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

#### **Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO2).

#### **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 N/A 3 0 0

### Accidental release measures

**Personal Precautions** Do not get in eyes, on skin, or on clothing.

**Environmental Precautions** See Section 12 for additional Ecological Information.

Up

Methods for Containment and Clean Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Do not let this chemical enter the environment.

### 7. Handling and storage

Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not ingest. Handling

If swallowed then seek immediate medical assistance. Handle product only in closed

system or provide appropriate exhaust ventilation.

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

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

Materials. Strong oxidizing agents.

#### 8. Exposure controls / personal protection

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

limitsestablished by the region specific regulatory bodies.

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations

and safety showers are close to the workstation location.

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

Personal protective equipment

**Eye Protection** Goggles

Hand Protection	Protective gloves		
Glove material Natural rubber Butyl rubber Nitrile rubber Neoprene	Breakthrough time See manufacturers recommendations	Glove thickness -	Glove comments Splash protection only
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:** Particulates filter conforming to EN 143 Acid gases filter Type E Yellow conforming to EN14387

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

#### **Environmental exposure controls**

No information available.

#### **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

Physical State Viscous liquid Liquid

Appearance Clear
Odor Odorless

Odor Threshold<br/>pHNo information available<br/>No information availableMelting Point/RangeNo data available

Boiling Point/Range 163 °C / 325.4 °F @ 16 mmHg

Flash Point 212 °C / 413.6 °F
Evaporation Rate No information available
Flammability (solid,qas) Not applicable

Flammability (solid,gas)

Flammability or explosive limits

Upper<br/>LowerNo data available<br/>No data availableVapor PressureNo information availableVapor DensityNo information available

Specific Gravity 0.991

Solubility No information available

Partition coefficient; n-octanol/waterNo data availableAutoignition TemperatureNo information availableDecomposition TemperatureNo information available

Viscosity
No information available
Molecular Formula
C16 H30 O3

Molecular Formula C16 H30 O3
Molecular Weight 270.4

## 10. Stability and reactivity

Reactive Hazard None known, based on information available

#### 2-Ethylhexanoic anhydride

Stability Moisture sensitive.

**Conditions to Avoid** Incompatible products. Exposure to moist air or water.

**Incompatible Materials** Strong oxidizing agents

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2)

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity** 

**Product Information** 

No acute toxicity information is available for this product

**Component Information** 

**Toxicologically Synergistic** 

No information available

**Products** 

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

No information available Irritation

Sensitization No information available

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

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico	ĺ
2-Ethylhexanoic	36765-89-6	Not listed	ĺ				
anhydride							ĺ

**Mutagenic Effects** No information available

Reproductive Effects No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

STOT - single exposure Respiratory system

None known STOT - repeated exposure

**Aspiration hazard** No information available

delayed

Symptoms / effects,both acute and 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

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

### 12. Ecological information

**Ecotoxicity** 

Do not empty into drains.

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

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

### 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 UN3265

Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

**Technical Name** 2-Ethylhexanoic anhydride

Hazard Class 8
Packing Group III

TDG

UN-No UN3265

Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Hazard Class 8
Packing Group |||

IATA

UN-No UN3265

Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Hazard Class 8
Packing Group III

IMDG/IMO

UN-No UN3265

Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Hazard Class 8
Packing Group III

## 15. Regulatory information

#### **International Inventories**

Componen	t	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
2-Ethylhexanoic ar	hydride	36765-89-6	-	-	-	-	253-195-1	-	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
2-Ethylhexanoic anhydride	36765-89-6	Х	-	-	-	-	-	-	Х

#### 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 meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

#### Other International Regulations

#### Authorisation/Restrictions according to EU REACH

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)
2-Ethylhexanoic anhydride	36765-89-6	Not applicable	Not applicable	Not applicable	Not applicable
Component	CAS-No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
2-Ethylhexanoic anhydride	36765-89-6	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information

Prepared By Regulatory Affairs

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

Revision Date 14-August-2023 Print Date 14-August-2023

**Revision Summary**This document has been updated to comply with the requirements of WHMIS 2015 to align

with the Globally Harmonised System (GHS) 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**