

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

<b>Product Description:</b>	<b>Eaton's Reagent</b>
<b>Cat No. :</b>	<b>L15607</b>
<b>Synonyms</b>	Phosphorus pentoxide, 7.5 wt.% solution in methanesulfonic acid
<b>Molecular Formula</b>	O10 P4

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

<b>Recommended Use</b>	Laboratory chemicals.
<b>Uses advised against</b>	No Information available

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

<b>Company</b>	Avocado Research Chemicals Ltd. (Part of Thermo Fisher Scientific) Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608
----------------	--

<b>E-mail address</b>	begel.sdsdesk@thermofisher.com
-----------------------	--------------------------------

### 1.4. 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

<b>Poison Centre - Emergency information services</b>	<b>Ireland</b> : National Poisons Information Centre (NPIC) - <b>01 809 2166</b> (8am-10pm, 7 days a week) <b>Malta</b> : +356 2395 2000 <b>Cyprus</b> : +357 2240 5611
---	--

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

**GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567**

#### Physical hazards

Substances/mixtures corrosive to metal

Category 1 (H290)

# SAFETY DATA SHEET

Eaton's Reagent

Revision Date 30-Nov-2024

## Health hazards

Acute oral toxicity  
Acute dermal toxicity  
Skin Corrosion/Irritation  
Serious Eye Damage/Eye Irritation  
Specific target organ toxicity - (single exposure)

Category 4 (H302)  
Category 4 (H312)  
Category 1 A (H314)  
Category 1 (H318)  
Category 3 (H335)

## Environmental hazards

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

## 2.2. Label elements



Signal Word

Danger

## Hazard Statements

H290 - May be corrosive to metals  
H314 - Causes severe skin burns and eye damage  
H335 - May cause respiratory irritation  
H302 + H312 - Harmful if swallowed or in contact with skin  
EUH014 - Reacts violently with water

## Precautionary Statements

P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P310 - Immediately call a POISON CENTER or doctor/physician  
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

## 2.3. Other hazards

Toxic to terrestrial vertebrates  
This product does not contain any known or suspected endocrine disruptors

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

## 3.2. Mixtures

Component	CAS No	EC No	Weight %	GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
Methanesulfonic acid, mixt. with phosphorus oxide (P2O5)	39394-84-8		100	Skin Corr. 1A (H314) Eye Dam. 1 (H318)

ALFAAL15607

# SAFETY DATA SHEET

Eaton's Reagent

Revision Date 30-Nov-2024

				Acute Tox. 4 (H302) Acute Tox. 4 (H312) STOT SE 3 (H335) Met. Corr. 1 (H290) (EUH014)
Methanesulfonic acid	75-75-2	EEC No. 200-898-6	92.5	Met. Corr. 1 (H290) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Skin Corr. 1B (H314) Eye Dam. 1 (H318) STOT SE 3 (H335)
Phosphorus pentoxide	1314-56-3	EEC No. 215-236-1	7.5	Skin Corr. 1A (H314) Eye Dam. 1 (H318) (EUH014)

Full text of Hazard Statements: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of 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. Immediate medical attention is required.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Call a physician immediately.
<b>Ingestion</b>	Do NOT induce vomiting. Clean mouth with water. Never give anything by mouth to an unconscious person. Call a physician immediately.
<b>Inhalation</b>	If not breathing, give artificial respiration. Remove from exposure, lie down. 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. Call a physician immediately.
<b>Self-Protection of the First Aider</b>	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

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

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

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

<b>Notes to Physician</b>	Treat symptomatically.
---------------------------	------------------------

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

# SAFETY DATA SHEET

Eaton's Reagent

Revision Date 30-Nov-2024

## Suitable Extinguishing Media

Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam. CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

## Extinguishing media which must not be used for safety reasons

Water.

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

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes. Reacts violently with water.

## Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Hydrogen chloride gas.

### 5.3. Advice 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.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### 6.2. Environmental precautions

Should not be released into the environment. See Section 12 for additional Ecological Information. Do not flush into surface water or sanitary sewer system.

### 6.3. Methods and material for containment and cleaning up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Do not expose spill to water.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Do not allow contact with water.

## 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.

### 7.2. Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Corrosives area. Store under an inert atmosphere. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from water or moist air.

Technical Rules for Hazardous Substances (TRGS) 510

Class 8A

ALFAAL15607

# SAFETY DATA SHEET

Eaton's Reagent

Revision Date 30-Nov-2024

Storage Class (LGK) (Germany)

## 7.3. Specific end use(s)

Use in laboratories

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### Exposure limits

List source(s): **EU** - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC **UK** - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020. **IRE** - 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority

Component	The United Kingdom	European Union	Ireland
Phosphorus pentoxide	STEL: 2 mg/m <sup>3</sup> 15 min TWA: 1 mg/m <sup>3</sup> 8 hr	TWA: 1 mg/m <sup>3</sup> (8hr)	TWA: 1 mg/m <sup>3</sup> 8 hr. STEL: 3 mg/m <sup>3</sup> 15 min

#### Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

#### Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

See table for values

Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
Methanesulfonic acid 75-75-2 ( 92.5 )				DNEL = 19.44mg/kg bw/day
Phosphorus pentoxide 1314-56-3 ( 7.5 )				DNEL = 68.7mg/kg bw/day

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Methanesulfonic acid 75-75-2 ( 92.5 )			DNEL = 2.9 mg/m <sup>3</sup>	DNEL = 6.76mg/m <sup>3</sup>
Phosphorus pentoxide 1314-56-3 ( 7.5 )				DNEL = 1mg/m <sup>3</sup>

#### Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water	Fresh water sediment	Water Intermittent	Microorganisms in sewage treatment	Soil (Agriculture)
Methanesulfonic acid 75-75-2 ( 92.5 )	PNEC = 0.012mg/L	PNEC = 0.0444mg/kg sediment dw	PNEC = 0.12mg/L	PNEC = 100mg/L	PNEC = 0.00183mg/kg soil dw
Phosphorus pentoxide 1314-56-3 ( 7.5 )	PNEC = 66.5µg/L	PNEC = 249µg/kg sediment dw	PNEC = 665µg/L	PNEC = 10mg/L	PNEC = 10.7µg/kg soil dw

Component	Marine water	Marine water	Marine water	Food chain	Air
-----------	--------------	--------------	--------------	------------	-----

# SAFETY DATA SHEET

Eaton's Reagent

Revision Date 30-Nov-2024

		sediment	intermittent		
Methanesulfonic acid 75-75-2 ( 92.5 )	PNEC = 0.0012mg/L	PNEC = 0.00444mg/kg sediment dw			
Phosphorus pentoxide 1314-56-3 ( 7.5 )	PNEC = 6.65µg/L	PNEC = 24.9µg/kg sediment dw			

## 8.2. Exposure controls

### 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 (European standard - EN 166)

#### Hand Protection

Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Natural rubber	See manufacturers	-	EN 374	(minimum requirement)
Nitrile rubber	recommendations			
Neoprene				
PVC				

#### Skin and body protection

Long sleeved clothing.

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure 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.

Remove gloves with care avoiding skin contamination.

#### Respiratory Protection

No protective equipment is needed under normal use conditions.

#### Large scale/emergency use

Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

#### Small scale/Laboratory use

Maintain adequate ventilation

#### Environmental exposure controls

Prevent product from entering drains.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

#### Physical State

Liquid

#### Appearance

Light yellow

#### Odor

No information available

#### Odor Threshold

No data available

#### Melting Point/Range

No data available

#### Softening Point

No data available

#### Boiling Point/Range

122 °C / 251.6 °F

@ 1 mmHg

# SAFETY DATA SHEET

Eaton's Reagent

Revision Date 30-Nov-2024

Flammability (liquid)	No data available	
Flammability (solid,gas)	Not applicable	Liquid
Explosion Limits	No data available	
Flash Point	> 110 °C / > 230 °F	<b>Method -</b> No information available
Autoignition Temperature	No data available	
Decomposition Temperature	No data available	
pH	2	(1%)
Viscosity	No data available	
Water Solubility	No information available	
Solubility in other solvents	No information available	
Partition Coefficient (n-octanol/water)		
Component	<b>log Pow</b>	
Methanesulfonic acid	-2.4	
Vapor Pressure	No data available	
Density / Specific Gravity	1.500	
Bulk Density	Not applicable	Liquid
Vapor Density	No data available	(Air = 1.0)
Particle characteristics	Not applicable (liquid)	

## 9.2. Other information

Molecular Formula	O10 P4
Molecular Weight	283.89

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Yes

### 10.2. Chemical stability

Moisture sensitive.

### 10.3. Possibility of hazardous reactions

Hazardous Polymerization	No information available.
Hazardous Reactions	None under normal processing. Reacts violently with water.

### 10.4. Conditions to avoid

Incompatible products. Exposure to moist air or water. Exposure to moisture.

### 10.5. Incompatible materials

Strong oxidizing agents. Bases. Water. Metals. Amines. Ammonia. Alcohols. Peroxides.  
Strong reducing agents.

### 10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrogen chloride gas.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Product Information

(a) acute toxicity; Oral	Category 4
-----------------------------	------------

ALFAAL15607

# SAFETY DATA SHEET

Eaton's Reagent

Revision Date 30-Nov-2024

**Dermal  
Inhalation**

Category 4  
Based on available data, the classification criteria are not met

## Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methanesulfonic acid	649 mg/kg ( Rat )	1000 - 2000 mg/kg ( Rabbit )	1.3 mg/L/6h ( Rat )
Phosphorus pentoxide	-	-	LC50 = 1217 mg/m <sup>3</sup> ( Rat ) 1 h

(b) skin corrosion/irritation; Category 1 A

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

Respiratory No data available  
Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; Category 3

Results / Target organs Respiratory system.

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; No data available

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

**Symptoms / effects, both acute and delayed** 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.

## 11.2. Information on other hazards

**Endocrine Disrupting Properties** Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### **Ecotoxicity effects**

Do not empty into drains. Contains a substance which is: Harmful to aquatic organisms. The product contains following substances which are hazardous for the environment.



# SAFETY DATA SHEET

Eaton's Reagent

Revision Date 30-Nov-2024

Component	Freshwater Fish	Water Flea	Freshwater Algae
Methanesulfonic acid	Oncorhynchus mykiss: LC50=73 mg/L 96h	EC50: = 12 mg/L, 48h (Daphnia pulex)	

**12.2. Persistence and degradability** No information available  
**Persistence** Persistence is unlikely.  
**Degradation in sewage treatment plant** Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.

**12.3. Bioaccumulative potential** Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Methanesulfonic acid	-2.4	No data available

**12.4. Mobility in soil** No information available

**12.5. Results of PBT and vPvB assessment** No data available for assessment.

**12.6. Endocrine disrupting properties**  
**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors

**12.7. Other adverse effects**  
**Persistent Organic Pollutant** This product does not contain any known or suspected substance  
**Ozone Depletion Potential** This product does not contain any known or suspected substance

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Waste from Residues/Unused Products** Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

**Contaminated Packaging** Dispose of this container to hazardous or special waste collection point.

**European Waste Catalogue (EWC)** According to the European Waste Catalog, Waste Codes are not product specific, but application specific.

**Other Information** Do not flush to sewer. Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Large amounts will affect pH and harm aquatic organisms.

## SECTION 14: TRANSPORT INFORMATION

### IMDG/IMO

**14.1. UN number** UN2922  
**14.2. UN proper shipping name** Corrosive liquid, toxic, n.o.s.  
**Technical Shipping Name** Methanesulfonic acid, mixt. with phosphorus oxide (P2O5) ,Alkane sulfonic acid

ALFAAL15607

# SAFETY DATA SHEET

Eaton's Reagent

Revision Date 30-Nov-2024

**14.3. Transport hazard class(es)** 8  
**Subsidiary Hazard Class** 6.1  
**14.4. Packing group** II

## ADR

**14.1. UN number** UN2922  
**14.2. UN proper shipping name** Corrosive liquid, toxic, n.o.s.  
**Technical Shipping Name** Methanesulfonic acid, mixt. with phosphorus oxide (P2O5) ,Alkane sulfonic acid  
**14.3. Transport hazard class(es)** 8  
**Subsidiary Hazard Class** 6.1  
**14.4. Packing group** II

## IATA

**14.1. UN number** UN2922  
**14.2. UN proper shipping name** Corrosive liquid, toxic, n.o.s.  
**Technical Shipping Name** Methanesulfonic acid, mixt. with phosphorus oxide (P2O5) ,Alkane sulfonic acid  
**14.3. Transport hazard class(es)** 8  
**Subsidiary Hazard Class** 6.1  
**14.4. Packing group** II

**14.5. Environmental hazards** No hazards identified

**14.6. Special precautions for user** No special precautions required.

**14.7. Maritime transport in bulk according to IMO instruments** Not applicable, packaged goods

## SECTION 15: REGULATORY INFORMATION

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

#### International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
Methanesulfonic acid, mixt. with phosphorus oxide (P2O5)	39394-84-8	-	-	-	-	X	-	-	-
Methanesulfonic acid	75-75-2	200-898-6	-	-	X	X	KE-23186	X	X
Phosphorus pentoxide	1314-56-3	215-236-1	-	-	X	X	KE-12129	X	X

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Methanesulfonic acid, mixt. with phosphorus oxide (P2O5)	39394-84-8	-	-	-	-	-	X	-
Methanesulfonic acid	75-75-2	X	ACTIVE	X	-	X	X	X
Phosphorus pentoxide	1314-56-3	X	ACTIVE	X	-	X	X	X

**Legend:** X - Listed '-' - Not Listed

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

### Authorisation/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous	REACH Regulation (EC 1907/2006) article 59 - Candidate List of
-----------	--------	---	--	--

# SAFETY DATA SHEET

Eaton's Reagent

Revision Date 30-Nov-2024

			Substances	Substances of Very High Concern (SVHC)
Methanesulfonic acid, mixt. with phosphorus oxide (P2O5)	39394-84-8	-	-	-
Methanesulfonic acid	75-75-2	-	Use restricted. See entry 75. (see link for restriction details)	-
Phosphorus pentoxide	1314-56-3	-	Use restricted. See entry 75. (see link for restriction details)	-

## REACH links

<https://echa.europa.eu/substances-restricted-under-reach>

## Seveso III Directive (2012/18/EC)

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
Methanesulfonic acid, mixt. with phosphorus oxide (P2O5)	39394-84-8	Not applicable	Not applicable
Methanesulfonic acid	75-75-2	Not applicable	Not applicable
Phosphorus pentoxide	1314-56-3	Not applicable	Not applicable

## Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

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

Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

## National Regulations

**UK** - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

## WGK Classification

Water endangering class = 1 (self classification)

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Methanesulfonic acid	WGK1	
Phosphorus pentoxide	WGK1	

Component	Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81)	Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC)	Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure
Methanesulfonic acid	Prohibited and Restricted		

# SAFETY DATA SHEET

Eaton's Reagent

Revision Date 30-Nov-2024

75-75-2 ( 92.5 )	Substances		
------------------	------------	--	--

## 15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

## SECTION 16: OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3

H290 - May be corrosive to metals  
H302 - Harmful if swallowed  
H312 - Harmful in contact with skin  
H314 - Causes severe skin burns and eye damage  
H318 - Causes serious eye damage  
H335 - May cause respiratory irritation  
EUH014 - Reacts violently with water

### Legend

**CAS** - Chemical Abstracts Service

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

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

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

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

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

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

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

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**WEL** - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**NOEC** - No Observed Effect Concentration

**PBT** - Persistent, Bioaccumulative, Toxic

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer  
Predicted No Effect Concentration (PNEC)

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

### Key literature references and sources for data

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**ATE** - Acute Toxicity Estimate

**VOC** - (Volatile Organic Compound)

### Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

**Physical hazards** On basis of test data

**Health Hazards** Calculation method

**Environmental hazards** Calculation method

### Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

**Prepared By**

Health, Safety and Environmental Department

**Revision Date**

30-Nov-2024

**Revision Summary**

Not applicable.

# **SAFETY DATA SHEET**

Eaton's Reagent

Revision Date 30-Nov-2024

---

**This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.**

## **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 Safety Data Sheet**