

according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Creation Date 24-Nov-2010 Revision Date 26-Mar-2024 Revision Number 10

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

1.1. Product identifier

Product Description: <u>Sodium percarbonate</u>

Cat No. : 370730000; 370730025; 370730250; 370735000

Synonyms Sodium carbonate hydrogen peroxide

CAS No 15630-89-4 **EC No** 239-707-6

Molecular Formula Na2 C O3 . 1.5 H2 O2

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

Recommended Use Laboratory chemicals.

Sector of use SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

Product category PC21 - Laboratory chemicals

Process categories PROC15 - Use as a laboratory reagent

Environmental release category ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates)

Uses advised against No Information available

1.3. Details of the supplier of the safety data sheet

Company

UK entity/business name

Fisher Scientific UK Bishop Meadow Road,

Loughborough, Leicestershire LE11 5RG, United Kingdom

EU entity/business name

Thermo Fisher Scientific

Janssen Pharmaceuticalaan 3a, 2440 Geel, Belgium

E-mail address 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

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

Physical hazards

Sodium percarbonate Revision Date 26-Mar-2024

Oxidizing solids Category 3 (H272)

Health hazards

Acute oral toxicity
Skin Corrosion/Irritation
Serious Eye Damage/Eye Irritation
Category 2 (H315)
Category 1 (H318)

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

H272 - May intensify fire; oxidizer

H302 - Harmful if swallowed

H315 - Causes skin irritation

H318 - Causes serious eye damage

Precautionary Statements

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P220 - Keep away from clothing and other combustible materials

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

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

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

2.3. Other hazards

In accordance with Annex XIII of the REACH Regulation, inorganic substances do not require assessment

Toxic to terrestrial vertebrates

This product does not contain any known or suspected endocrine disruptors

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Component	CAS No	EC No	Weight %	CLP Classification - According to
·				GB-CLP Regulations UK SI 2019/720 and
				UK SI 2020/1567

Sodium percarbonate

Sodium carbonate	497-19-8	207-838-8	1-10	Eye Irrit. 2 (H319)
Sodium silicate (mol ratio > 3.2)	1344-09-8	215-687-4	<2	Met. Corr. 1 (H290)
				Skin Corr. 1B (H314)
				Eye Dam. 1 (H318)
				STOT SE 3 (H335)
Sodium percarbonate	15630-89-4	239-707-6	>90	Ox. Sol. 3 (H272)
·				Eye Dam. 1 (H318)

Component	Specific concentration limits (SCL's)	M-Factor	Component notes
Sodium percarbonate	Eye Dam. 1 : C ≥ 25 % Eye Irrit. 2 : 7.5 % ≤ C < 25 %	-	-

Components	Reach Registration Number	
Sodium percarbonate	01-2119457268-30	

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice If symptoms persist, call a physician.

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. If skin irritation persists,

call a physician.

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

symptoms occur.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

Self-Protection of the First Aider 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

None reasonably foreseeable. Causes severe eye damage.

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

Notes to Physician Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO2). Dry chemical. Chemical foam.

Extinguishing media which must not be used for safety reasons

No information available.

ACR37073

Revision Date 26-Mar-2024

Acute Tox. 4 (H302)

Sodium percarbonate Revision Date 26-Mar-2024

5.2. Special hazards arising from the substance or mixture

Oxidizer: Contact with combustible/organic material may cause fire. May ignite combustibles (wood paper, oil, clothing, etc.).

Hazardous Combustion Products

None under normal use conditions.

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.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

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

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation. Keep away from clothing and other combustible materials.

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 away from heat, sparks and flame. Do not store near combustible materials. Keep under nitrogen. Keep containers tightly closed in a dry, cool and well-ventilated place.

Technical Rules for Hazardous Substances (TRGS) 510 Class 5.1B Storage Class (LGK) (Germany)

7.3. Specific end use(s)

Use in laboratories

Revision Date 26-Mar-2024

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

List source(s):

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)

Workers; See table for values

Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
Sodium silicate (mol ratio > 3.2)				DNEL = 1.59mg/kg
1344-09-8 (<2)				bw/day
Sodium percarbonate 15630-89-4 (>90)	DNEL = 12.8mg/cm2		DNEL = 12.8mg/cm2	

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Sodium silicate (mol ratio > 3.2)				DNEL = 5.61mg/m^3
1344-09-8 (<2)				-
Sodium percarbonate			DNEL = 5mg/m ³	
15630-89-4 (>90)			-	

Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water	Fresh water	Water Intermittent	Microorganisms in	Soil (Agriculture)
		sediment		sewage treatment	
Sodium silicate (mol ratio	PNEC = 7.5mg/L		PNEC = 7.5mg/L	PNEC = 348mg/L	
> 3.2)					
1344-09-8 (<2)					
Sodium percarbonate	PNEC = 0.035mg/L	_	PNEC = 0.035mg/L	PNEC = 16.24mg/L	
15630-89-4 (>90)	_			-	

Component	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
Sodium silicate (mol ratio > 3.2) 1344-09-8 (<2)	PNEC = 1mg/L				
	PNEC = 0.035mg/L				

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

Sodium percarbonate Revision Date 26-Mar-2024

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 Nitrile rubber	See manufacturers recommendations	-	EN 374	(minimum requirement)
Neoprene	recommendations			
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 When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

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 **Recommended Filter type:** Particulates filter conforming to EN 143

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure

limits are exceeded or if irritation or other symptoms are experienced.

Solid

Recommended half mask:- Particle filtering: EN149:2001 When RPE is used a face piece Fit Test should be conducted

system.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State Powder Solid

Appearance White Odor Odorless

Odor Threshold
Melting Point/Range
Softening Point
Boiling Point/Range
No data available
No data available
No information available

Flammability (liquid) Not applicable

Flammability (solid,gas)

No information available

Explosion Limits No data available

Flash Point No information available Method - No information available

Autoignition TemperatureNot applicableDecomposition TemperatureNo data available

pH No information available

Viscosity Not applicable Solid

Water Solubility 150 g/l

Sodium percarbonate Revision Date 26-Mar-2024

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

No data available **Vapor Pressure Density / Specific Gravity** No data available No data available **Bulk Density Vapor Density** Not applicable

No data available **Particle characteristics**

9.2. Other information

Na2 C O3 . 1.5 H2 O2 Molecular Formula

Molecular Weight 157.01 **Oxidizing Properties** Oxidizer

Evaporation Rate Not applicable - Solid

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

10.2. Chemical stability

Moisture sensitive. Stable. Oxidizer: Contact with combustible/organic material may cause

Solid

Yes

10.3. Possibility of hazardous reactions

Hazardous Polymerization Hazardous polymerization does not occur.

None under normal processing. **Hazardous Reactions**

10.4. Conditions to avoid

Excess heat. Incompatible products. Exposure to moist air or water. Combustible material.

10.5. Incompatible materials

Acids. Bases. Water. Finely powdered metals. Organic materials. Reducing Agent. Finely

powdered metals. Strong reducing agents. Combustible material.

10.6. Hazardous decomposition products

None under normal use conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

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

Product Information

(a) acute toxicity:

Category 4 Oral

Based on available data, the classification criteria are not met **Dermal** Inhalation Based on available data, the classification criteria are not met

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium carbonate	2800 mg/kg (Rat)	> 2000 mg/kg (rabbit)	2.3 mg/l 2h (Rat)
Sodium silicate (mol ratio > 3.2)	1153 mg/kg(Rat) 1960 mg/kg(Rat)	-	-
Sodium percarbonate	LD50 = 1034 mg/kg (Rat)	LD50 > 2000 mg/kg (Rabbit)	-

Sodium percarbonate Revision Date 26-Mar-2024

(b) skin corrosion/irritation; Category 2

(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

(f) carcinogenicity; Based on available data, the classification criteria are not met

There are no known carcinogenic chemicals in this product

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

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

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

None known. **Target Organs**

Not applicable (j) aspiration hazard;

Solid

Symptoms / effects,both acute and No information available.

delayed

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

Contains a substance which is:. The product contains following substances which are **Ecotoxicity effects**

hazardous for the environment. Toxic to aquatic organisms.

Component	Freshwater Fish	Water Flea	Freshwater Algae
Sodium carbonate	Lepomis macrochirus: LC50: 300 mg/L/96h	EC50: = 265 mg/L, 48h (Daphnia magna)	
	Gambusia affinis: LC50: 740 mg/L/96h	(Dapillia magna)	
Sodium silicate (mol ratio > 3.2)	LC50: = 3185 mg/L, 96h semi-static (Brachydanio rerio) LC50: 301 - 478 mg/L, 96h (Lepomis macrochirus)		
Sodium percarbonate	LC50: = 70.7 mg/L, 96h static (Pimephales promelas)	EC50: = 4.9 mg/L, 48h (Daphnia pulex)	

Sodium percarbonate Revision Date 26-Mar-2024

Component **Microtox** M-Factor

12.2. Persistence and degradability

Sodium carbonate

Persistence Soluble in water, Persistence is unlikely, based on information available.

Not relevant for inorganic substances. Degradability

Degradation in sewage Contains substances known to be hazardous to the environment or not degradable in waste treatment plant

water treatment plants.

12.3. Bioaccumulative potential Bioaccumulation is unlikely

The product is water soluble, and may spread in water systems Will likely be mobile in the 12.4. Mobility in soil

environment due to its water solubility. Highly mobile in soils

12.5. Results of PBT and vPvB

assessment

In accordance with Annex XIII of the REACH Regulation, inorganic substances do not

require 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 Ozone Depletion Potential

This product does not contain any known or suspected substance 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.

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

14.1. UN number UN3378

14.2. UN proper shipping name SODIUM CARBONATE PEROXYHYDRATE

14.3. Transport hazard class(es) 5.1 14.4. Packing group Ш

Sodium percarbonate Revision Date 26-Mar-2024

ADR

14.1. UN number UN3378

14.2. UN proper shipping name SODIUM CARBONATE PEROXYHYDRATE

14.3. Transport hazard class(es) 5.1 **14.4. Packing group** III

IATA

14.1. UN number UN3378

14.2. UN proper shipping name SODIUM CARBONATE PEROXYHYDRATE

14.3. Transport hazard class(es) 5. **14.4. Packing group** III

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
Sodium carbonate	497-19-8	207-838-8	-	-	Х	X	KE-31380	X	Х
Sodium silicate (mol ratio > 3.2)	1344-09-8	215-687-4	-	-	Х	Х	KE-31002	X	Х
Sodium percarbonate	15630-89-4	239-707-6	-	-	Х	Х	KE-05-057	Х	Х
							2		

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Sodium carbonate	497-19-8	X	ACTIVE	X	ı	X	Х	Х
Sodium silicate (mol ratio > 3.2)	1344-09-8	Х	ACTIVE	Х	-	X	Х	Х
Sodium percarbonate	15630-89-4	X	ACTIVE	Х	-	Х	Х	Х

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 Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Sodium carbonate	497-19-8	-	Use restricted. See item 75. (see link for restriction details)	-
Sodium silicate (mol ratio > 3.2)	1344-09-8	-	-	-
Sodium percarbonate	15630-89-4	-	-	-

REACH links

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

Sodium percarbonate Revision Date 26-Mar-2024

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
Sodium carbonate	497-19-8	Not applicable	Not applicable
Sodium silicate (mol ratio > 3.2)	1344-09-8	Not applicable	Not applicable
Sodium percarbonate	15630-89-4	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 .

National Regulations

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

WGK Classification See table for values

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Sodium carbonate	WGK1	
Sodium silicate (mol ratio > 3.2)	WGK1	
Sodium percarbonate	WGK1	

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

SECTION 16: OTHER INFORMATION

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

H302 - Harmful if swallowed

H315 - Causes skin irritation

H318 - Causes serious eye damage

H272 - May intensify fire; oxidizer

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

Legend

Sodium percarbonate Revision Date 26-Mar-2024

Substances List

CAS - Chemical Abstracts Service

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

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

IARC - International Agency for Research on Cancer

NZIoC - New Zealand Inventory of Chemicals

Predicted No Effect Concentration (PNEC)

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

EC50 - Effective Concentration 50%

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic

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

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

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

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.

Creation Date 24-Nov-2010 26-Mar-2024 **Revision Date**

Revision Summary SDS sections updated.

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

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

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate

TWA - Time Weighted Average

LD50 - Lethal Dose 50%

VOC - (Volatile Organic Compound)