

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

Creation Date 01-Feb-2005

Revision Date 21-Sep-2023

Revision Number 6

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

1.1. Product identifier

Product Description: Cat No. : Synonyms Index No CAS No EC No Molecular Formula	<u>1,2,4-Trimethylbenzene</u> <u>140090000; 140090010; 140090025; 140090100; 140090250</u> Pseudocumene 601-043-00-3 95-63-6 202-436-9 C9 H12
1.2. Relevant Identified uses of the	substance or mixture and uses advised against
Recommended Use Uses advised against	Laboratory chemicals. No Information available
1.3. Details of the supplier of the sa	ifety 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

Flammable liquids

Category 3 (H226)

Health hazards

1,2,4-Trimethylbenzene

Acute Inhalation Toxicity - Vapors Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Specific target organ toxicity - (single exposure)

Environmental hazards

Chronic aquatic toxicity

Full text of Hazard Statements: see section 16

2.2. Label elements



Signal Word

Warning

Hazard Statements

- H226 Flammable liquid and vapor
- H315 Causes skin irritation
- H332 Harmful if inhaled
- H411 Toxic to aquatic life with long lasting effects
- H319 Causes serious eye irritation
- H335 May cause respiratory irritation

Precautionary Statements

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

- P332 + P313 If skin irritation occurs: Get medical advice/attention
- P337 + P313 If eye irritation persists: Get medical advice/attention
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P273 Avoid release to the environment
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing
- 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

2.3. Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB)

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

Category 4 (H332) Category 2 (H315) Category 2 (H319) Category 3 (H335)

Category 2 (H411)

1,2,4-Trimethylbenzene

Revision Date 21-Sep-2023

				GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
Benzene, 1,2,4-trimethyl-	95-63-6	EEC No. 202-436-9	> 95	Flam. Liq. 3 (H226) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) Aquatic Chronic 2 (H411)

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.			
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			
	Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting			
4.3. Indication of any immediate medical attention and special treatment needed				

Notes to Physician

Treat symptomatically. Symptoms may be delayed.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.

Extinguishing media which must not be used for safety reasons Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Flammable. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Vapors may form explosive mixtures with air.

Hazardous Combustion Products

1,2,4-Trimethylbenzene

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

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. Remove all sources of ignition. Take precautionary measures against static discharges.

6.2. Environmental precautions

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. Remove all sources of ignition. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment.

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. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges.

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. Flammables area. Keep container tightly closed in a dry and well-ventilated place.

Technical Rules for Hazardous Substances (TRGS) 510 Class 3 Storage Class (LGK) (Germany)

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

ACR14009

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 **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
Benzene, 1,2,4-trimethyl-		TWA: 20 ppm (8h)	TWA: 20 ppm 8 hr.
		TWA: 100 mg/m ³ (8h)	TWA: 100 mg/m ³ 8 hr.
			STEL: 60 ppm 15 min
			STEL: 300 mg/m ³ 15 min

Biological limit values

List source(s):

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

See table for values

Component	Acute effects local	Acute effects	Chronic effects local	Chronic effects
	(Dermal)	systemic (Dermal)	(Dermal)	systemic (Dermal)
Benzene, 1,2,4-trimethyl- 95-63-6 (> 95)				DNEL = 16171mg/kg bw/day

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Benzene, 1,2,4-trimethyl- 95-63-6 (> 95)	DNEL = 100mg/m ³	DNEL = 100mg/m ³	DNEL = 100mg/m ³	DNEL = 100mg/m ³

Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water	Fresh water sediment		Microorganisms in sewage treatment	Soil (Agriculture)
Benzene, 1,2,4-trimethyl- 95-63-6 (> 95)	PNEC = 0.12mg/L	PNEC = 13.56mg/kg sediment dw	PNEC = 0.12mg/L	PNEC = 2.41mg/L	PNEC = 2.34mg/kg soil dw

Component	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
Benzene, 1,2,4-trimethyl-	PNEC = 0.12mg/L	PNEC =			
95-63-6 (> 95)	-	13.56mg/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. 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

Personal protective equipment Eye Protection	Goggles (European standard - EN 166)
Hand Protection	Protective gloves

Revision Date 21-Sep-2023

Glove material	Breakthrough tim	e Glove thickness	EU standard	Glove comments
Viton (R)	See manufacturer		EN 374	(minimum requirement)
. ,	recommendations			· · · ·
Skin and body prot	tection Long	sleeved clothing.		
Refer to manufacturer/s Ensure gloves are suital	ructions regarding per supplier for informatio ble for the task: Chem o take into considerat	n) ical compatability, Dex ion the specific local co	terity, Operational cond	ovided by the supplier of the gloves. ditions, User susceptibility, e.g. he product is used, such as the dange
Respiratory Protec	appro To pro	priate certified respirate	ors.	exposure limit they must use ent must be the correct fit and be use
arge scale/emergenc	are ex	ceeded or if irritation o nmended Filter type:	r other symptoms are e	approved respirator if exposure limits experienced pours filter Type A Brown conforming
Small scale/Laboratory	limits Reco i 141	are exceeded or if irrita nmended half mask:-	tion or other symptoms	; or; Half mask: EN140; plus filter, EN
Environmental exposu	re controls Preve syster		g drains. Do not allow r	naterial to contaminate ground water

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

1,2,4-Trimethylbenzene

Physical State	Liquid	
Appearance	Colorless	
Odor	aromatic	
Odor Threshold	No data available	
Melting Point/Range	-44 °C / -47.2 °F	
Softening Point	No data available	
Boiling Point/Range	168 °C / 334.4 °F	@ 760 mmHg
Flammability (liquid)	Flammable	On basis of test data
Flammability (solid,gas)	Not applicable	Liquid
Explosion Limits	Lower 0.9	
	Upper 6.4	
Flash Point	48 °C / 118.4 °F	Method - No information
Autoignition Temperature	500 °C / 932 °F	
Decomposition Temperature	No data available	
pH	No information available	
Viscosity	No data available	
Water Solubility	Insoluble	
Solubility in other solvents	No information available	
Partition Coefficient (n-octanol/wat	ter)	
Component	log Pow	
Benzene, 1,2,4-trimethyl-	3.63	
Vapor Pressure	7 mmHg @ 44.4 °C	
Density / Specific Gravity	0.880	

ACR14009

No information available

Revision Date 21-Sep-2023

1,2,4-Trimethylbenzene

Bulk Density Vapor Density Particle characteristics Not applicable 4.15 (Air = 1.0) Not applicable (liquid) Liquid (Air = 1.0)

9.2. Other information

Molecular Formula Molecular Weight Explosive Properties C9 H12 120.19 explosive air/vapour mixtures possible

SECTION 10: STABILITY AND REACTIVITY

10.1. ReactivityNone known, based on information available10.2. Chemical stabilityNo information available.10.3. Possibility of hazardous reactionsNo information available.10.4. Conditions to avoidHazardous polymerization does not occur.
None under normal processing.10.4. Conditions to avoidkeep away from open flames, hot surfaces and sources of ignition. Incompatible products.10.5. Incompatible materialsOxidizing agent.

10.6. Hazardous decomposition products

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

SECTION 11: TOXICOLOGICAL INFORMATION

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

Product Information

(a) acute toxicity; Oral

Inhalation

Dermal

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

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation		
Benzene, 1,2,4-trimethyl-	LD50 = 3280 mg/kg (Rat)	LD50 > 3160 mg/kg (Rabbit)	LC50 = 18 g/m ³ (Rat) 4 h		

(b) skin corrosion/irritation;	Category 2
--------------------------------	------------

(c) serious eye damage/irritation; Category 2

(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	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

11.2. Information on other hazards

1,2,4-Trimethylbenzene

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

The product contains following substances which are hazardous for the environment. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Component	Freshwater Fish	Water Flea	Freshwater Algae
Benzene, 1,2,4-trimethyl-	LC50: 7.19 - 8.28 mg/L, 96h flow-through (Pimephales promelas)	EC50: = 6.14 mg/L, 48h (Daphnia magna)	

12.2. Persistence and degradability Persistence

Degradation in sewage

treatment plant

Persistence is unlikely.

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)
Benzene, 1,2,4-trimethyl-	3.63	No data available

12.4. Mobility in soil

Spillage unlikely to penetrate soil The product is insoluble and floats on water The product

Revision Date 21-Sep-2023

	evaporates slowly . Is not likely mobile in the environment due its low water solubility. Spillage unlikely to penetrate soil
12.5. Results of PBT and vPvB assessment	Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB).
<u>12.6. Endocrine disrupting</u> properties Endocrine Disruptor Information	This product does not contain any known or suspected endocrine disruptors
<u>12.7. Other adverse effects</u> 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

1,2,4-Trimethylbenzene

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. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition.
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. Can be landfilled or incinerated, when in compliance with local regulations. Do not let this chemical enter the environment. Do not empty into drains.

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

14.1. UN number	UN1993
14.2. UN proper shipping name	Flammable liquid, n.o.s.
Technical Shipping Name	1,2,4-Trimethylbenzene
14.3. Transport hazard class(es)	3
14.4. Packing group	III

<u>ADR</u>

14.1. UN number	UN1993
14.2. UN proper shipping name	Flammable liquid, n.o.s.
Technical Shipping Name	1,2,4-Trimethylbenzene
14.3. Transport hazard class(es)	3
14.4. Packing group	III

<u>IATA</u>

14.1. UN number 14.2. UN proper shipping name Technical Shipping Name 14.3. Transport hazard class(es) 14.4. Packing group	UN1993 Flammable liquid, n.o.s. 1,2,4-Trimethylbenzene 3 III
14.5. Environmental hazards	Dangerous for the environment Product is a marine pollutant according to the criteria set by IMDG/IMO
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
Benzene, 1,2,4-trimethyl-	95-63-6	202-436-9	-	-	Х	Х	KE-34410	Х	Х
Component	CAS No	TSCA	TSCA Inventory notification -		DSL	NDSL	AICS	NZIoC	PICCS
			Active-	nactive					
Benzene, 1,2,4-trimethyl-	95-63-6	Х	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)
Benzene, 1,2,4-trimethyl-	95-63-6	-	Use restricted. See item 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) - Seveso III Directive (2012/18/EC	
		Qualifying Quantities for Major Accident	Qualifying Quantities for Safety Report
		Notification	Requirements
Benzene, 1,2,4-trimethyl-	95-63-6	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)?

1,2,4-Trimethylbenzene

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

See table for values

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Benzene, 1,2,4-trimethyl-	WGK2	

Component	France - INRS (Tables of occupational diseases)
Benzene, 1,2,4-trimethyl-	Tableaux des maladies professionnelles (TMP) - RG 84

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
Benzene, 1,2,4-trimethyl- 95-63-6 (> 95)	Prohibited and Restricted Substances	Group I	

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

H226 - Flammable liquid and vapor

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

H411 - Toxic to aquatic life with long lasting effects

Legend

Predicted No Effect Concentration (PNEC)

LD50 - Lethal Dose 50%

 CAS - Chemical Abstracts Service
 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
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

 PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances
 ENCS - Japanese Existing and New Chemical Substances NZIoC - New Zealand Inventory of Chemicals

 WEL - Workplace Exposure Limit ACGIH - American Conference of Governmental Industrial Hygienists
 TWA - Time Weighted Average IARC - International Agency for Research on Cancer

ACGIH - American Conference of Governmental Industrial Hygienists DNEL - Derived No Effect Level RPE - Respiratory Protective Equipment

Page 11/12

Revision Date 21-Sep-2023

LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic

1,2,4-Trimethylbenzene

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.

Chemical incident response training.

Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts.

Creation Date	01-Feb-2005
Revision Date	21-Sep-2023
Revision Summary	Not applicable.

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

VOC - (Volatile Organic Compound)

EC50 - Effective Concentration 50%

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative