

ALFAA40392

## Yttrium(III) oxide, Aerosol Refractory Paint

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

产品说明: 氧化钇(III)  
Product Description: Yttrium(III) oxide, Aerosol Refractory Paint

Cat No. : 40392

Supplier Avocado Research Chemicals Ltd.  
(Part of Thermo Fisher Scientific)  
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Recommended Use Laboratory chemicals.  
Uses advised against Food, drug, pesticide or biocidal product use

### SECTION 2. HAZARD IDENTIFICATION

**Physical State**  
Aerosol Liquid

**Appearance**  
White

**Odor**  
No information available

#### Emergency Overview

Extremely flammable aerosol. Pressurized container: May burst if heated. Causes serious eye irritation. Causes skin irritation. May cause drowsiness and dizziness. May cause respiratory irritation. Repeated exposure may cause skin dryness or cracking.

#### Classification of the substance or mixture

Extremely flammable aerosol.	Category 1
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity - (single exposure)	Category 3

#### Label Elements



Signal Word

Danger

# SAFETY DATA SHEET

## Yttrium(III) oxide, Aerosol Refractory Paint

**Hazard Statements**

H222 - Extremely flammable aerosol  
H229 - Pressurised container: May burst if heated  
H319 - Causes serious eye irritation  
H336 - May cause drowsiness or dizziness  
H315 - Causes skin irritation  
H335 - May cause respiratory irritation

**Precautionary Statements****Prevention**

P211 - Do not spray on an open flame or other ignition source  
P251 - Do not pierce or burn, even after use  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
P264 - Wash face, hands and any exposed skin thoroughly after handling  
P271 - Use only outdoors or in a well-ventilated area  
P280 - Wear eye protection/ face protection

**Response**

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P308 + P313 - IF exposed or concerned: Get medical advice/attention  
P332 + P313 - If skin irritation occurs: Get medical advice/attention  
P362 + P364 - Take off contaminated clothing and wash it before reuse

**Storage**

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

**Disposal**

P501 - Dispose of contents/ container to an approved waste disposal plant

**Physical and Chemical Hazards**

Extremely flammable. Vapors may cause flash fire or explosion. Extremely flammable aerosol. Pressurized container: May burst if heated.

**Health Hazards**

Causes serious eye irritation. May cause drowsiness or dizziness. Causes skin irritation. May cause respiratory irritation.

**Environmental hazards**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. Will likely be mobile in the environment due to its volatility. The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

This product does not contain any known or suspected endocrine disruptors.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight %
Acetone	67-64-1	35
Yttrium oxide (Y <sub>2</sub> O <sub>3</sub> )	1314-36-9	20
Ethyl alcohol	64-17-5	20
Propane	74-98-6	12.5
Butane	106-97-8	12.5

**SECTION 4. 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**

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Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

**Inhalation**

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

**Ingestion**

Clean mouth with water and drink afterwards plenty of water.

**Most important symptoms and effects**

None reasonably foreseeable. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: May cause pulmonary edema: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: May cause central nervous system depression

**Self-Protection of the First Aider**

Remove all sources of ignition. Use personal protective equipment as required.

**Notes to Physician**

Treat symptomatically. Symptoms may be delayed.

### SECTION 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Water spray, carbon dioxide (CO<sub>2</sub>), 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 water jetstream.

**Specific Hazards Arising from the Chemical**

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

**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. Fight fire remotely due to the risk of explosion.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions**

Use personal protective equipment as required. Ensure adequate ventilation.

**Environmental Precautions**

Should not be released into the environment. See Section 12 for additional Ecological Information.

**Methods for Containment and Clean Up**

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.  
Pressurized container: Do not pierce or burn, even after use

Refer to protective measures listed in Sections 8 and 13.

### SECTION 7. HANDLING AND STORAGE

**Handling**

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation.

**Storage**

Flammables area. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame.

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## Yttrium(III) oxide, Aerosol Refractory Paint

Pressurized container: Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

### Specific Use(s)

Use in laboratories

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Component	China	Taiwan	Thailand	Hong Kong
Acetone	TWA: 300 mg/m <sup>3</sup> STEL: 450 mg/m <sup>3</sup>	TWA: 200 ppm TWA: 475 mg/m <sup>3</sup>	TWA: 1000 ppm	TWA: 500 ppm TWA: 1187 mg/m <sup>3</sup> STEL: 750 ppm STEL: 1781 mg/m <sup>3</sup>
Yttrium oxide (Y <sub>2</sub> O <sub>3</sub> )	-	TWA: 1 mg/m <sup>3</sup>		-
Ethyl alcohol	-	TWA: 1000 ppm TWA: 1880 mg/m <sup>3</sup>	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1880 mg/m <sup>3</sup>
Propane	-	TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup>		TWA: 2500 ppm TWA: 4508 mg/m <sup>3</sup>
Butane	-	TWA: 800 ppm TWA: 1900 mg/m <sup>3</sup>		TWA: 800 ppm TWA: 1900 mg/m <sup>3</sup>

Component	ACGIH TLV	OSHA PEL	NIOSH	The United Kingdom	European Union
Acetone	TWA: 250 ppm STEL: 500 ppm	(Vacated) TWA: 750 ppm (Vacated) TWA: 1800 mg/m <sup>3</sup> (Vacated) STEL: 2400 mg/m <sup>3</sup> (Vacated) STEL: 1000 ppm TWA: 1000 ppm TWA: 2400 mg/m <sup>3</sup>	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m <sup>3</sup>	TWA: 500 ppm TWA: 1210 mg/m <sup>3</sup> STEL: 1500 ppm STEL: 3620 mg/m <sup>3</sup>	TWA: 500 ppm (8h) TWA: 1210 mg/m <sup>3</sup> (8h)
Yttrium oxide (Y <sub>2</sub> O <sub>3</sub> )	TWA: 1 mg/m <sup>3</sup>		IDLH: 500 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	-	
Ethyl alcohol	STEL: 1000 ppm	(Vacated) TWA: 1000 ppm (Vacated) TWA: 1900 mg/m <sup>3</sup> TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>	TWA: 1000 ppm TWA; 1920 mg/m <sup>3</sup> TWA WEL - STEL: 3000 ppm STEL; 5760 mg/m <sup>3</sup> STEL	
Propane	:	(Vacated) TWA: 1000 ppm (Vacated) TWA: 1800 mg/m <sup>3</sup> TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup>	IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup>	-	
Butane	STEL: 1000 ppm	(Vacated) TWA: 800 ppm (Vacated) TWA: 1900 mg/m <sup>3</sup>	IDLH: 1600 ppm TWA: 800 ppm TWA: 1900 mg/m <sup>3</sup>	STEL: 750 ppm 15 min STEL: 1810 mg/m <sup>3</sup> 15 min TWA: 600 ppm 8 hr TWA: 1450 mg/m <sup>3</sup> 8 hr Carc. containing >0.1% Buta-1,3-diene	

### Legend

ACGIH - American Conference of Governmental Industrial Hygienists  
OSHA - Occupational Safety and Health Administration  
NIOSH: NIOSH - National Institute for Occupational Safety and Health

### Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS70 General methods for sampling airborne gases and vapours MDHS 88 Volatile organic compounds in air. Laboratory method using diffusive samplers, solvent desorption and gas chromatography MDHS 96 Volatile organic compounds in air - Laboratory method using pumped solid sorbent tubes, solvent desorption and gas

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chromatography

### 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

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Butyl rubber	> 480 minutes	0.5 mm	EN 374 Level 6	As tested under EN374-3 Determination of Resistance to Permeation by Chemicals
Neoprene gloves	< 30 minutes	0.45 mm		

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 compatibility, 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.

**Skin and body protection** Long sleeved clothing

**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:** low boiling organic solvent Type AX Brown conforming to EN371

**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.  
**Recommended half mask:-** Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141  
 When RPE is used a face piece Fit Test should be conducted

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

**Environmental exposure controls** Do not allow material to contaminate ground water system.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** White  
**Physical State** Aerosol Liquid

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

**Method -** No information available

# SAFETY DATA SHEET

## Yttrium(III) oxide, Aerosol Refractory Paint

<b>Evaporation Rate</b>	No data available	
<b>Flammability (solid,gas)</b>	Not applicable	Liquid
<b>Explosion Limits</b>	No data available	
<b>Vapor Pressure</b>	No data available	
<b>Vapor Density</b>	No data available	(Air = 1.0)
<b>Specific Gravity / Density</b>	No data available	
<b>Bulk Density</b>	Not applicable	Liquid
<b>Water Solubility</b>	Partially miscible	
<b>Solubility in other solvents</b>	No information available	
<b>Partition Coefficient (n-octanol/water)</b>		
<b>Component</b>	<b>log Pow</b>	
Acetone	-0.24	
Ethyl alcohol	-0.32	
Propane	1.09	
Butane	2.31	
<b>Autoignition Temperature</b>	No data available	
<b>Decomposition Temperature</b>	No data available	
<b>Viscosity</b>	No data available	
<b>Explosive Properties</b>	Not explosive	Vapors may form explosive mixtures with air
<b>Oxidizing Properties</b>	Not oxidising	

### SECTION 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under normal conditions.
<b>Hazardous Reactions</b>	None under normal processing.
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to Avoid</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from sunlight and do not expose to temperatures exceeding 50 °C/122 °F.
<b>Materials to avoid</b>	Strong oxidizing agents.

**Hazardous Decomposition Products** Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Product Information

##### (a) acute toxicity;

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Acetone	5800 mg/kg ( Rat )	> 15800 mg/kg (rabbit) > 7400 mg/kg (rat)	76 mg/l, 4 h, (rat)
Yttrium oxide (Y <sub>2</sub> O <sub>3</sub> )			LC50 > 5.09 mg/L ( Rat ) 4 h
Ethyl alcohol	LD50 = 10470 mg/kg OECD 401 (Rat) 3450 mg/kg ( Mouse )		LC50 = 117-125 mg/l (4h) OECD 403 (rat) 20000 ppm/10H (rat)
Propane			LC50 > 20000 ppm ( Rat ) 4h
Butane			658 mg/L ( Rat ) 4 h

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

# SAFETY DATA SHEET

## Yttrium(III) oxide, Aerosol Refractory Paint

**(d) respiratory or skin sensitization;****Respiratory**

No data available

**Skin**

No data available

Component	Test method	Test species	Study result
Acetone 67-64-1 ( 35 )	Guinea Pig Maximisation Test (GPMT)	guinea pig	non-sensitising
Ethyl alcohol 64-17-5 ( 20 )	Mouse Ear Swelling Test (MEST)	mouse	non-sensitising
	OECD Test Guideline 429 Local Lymph Node Assay	mouse	non-sensitising

**(e) germ cell mutagenicity;**

No data available

Component	Test method	Test species	Study result
Acetone 67-64-1 ( 35 )	OECD Test Guideline 471 AMES test	in vivo	negative
	OECD Test Guideline 476 Mammalian Gene cell mutation	in vitro	negative
Ethyl alcohol 64-17-5 ( 20 )	AMES test OECD Test Guideline 471	in vitro Bacteria	negative
	Gene cell mutation OECD Test Guideline 476	in vitro Mammalian	negative

**(f) carcinogenicity;**

No data available

There are no known carcinogenic chemicals in this product

Component	EU	UK	Germany	IARC
Butane	Carc Cat. 1A			

**(g) reproductive toxicity;**

No data available

Component	Test method	Test species / Duration	Study result
Ethyl alcohol 64-17-5 ( 20 )	OECD Test Guideline 416	Oral / mouse 2 Generation	NOAEL = 13.8 g/kg/day
	OECD Test Guideline 414	Inhalation / Rat	NOAEC = 16000 ppm

**(h) STOT-single exposure;**

No data available

**Results / Target organs**Respiratory system  
Central nervous system (CNS)**(i) STOT-repeated exposure;**

No data available

**Target Organs**

No information available.

**(j) aspiration hazard;**

Based on available data, the classification criteria are not met

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

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: May cause pulmonary edema: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: May cause central nervous system depression

## SECTION 12. ECOLOGICAL INFORMATION

# SAFETY DATA SHEET

## Yttrium(III) oxide, Aerosol Refractory Paint

### Ecotoxicity effects

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Acetone	Oncorhynchus mykiss: LC50 = 5540 mg/l 96h Alburnus alburnus: LC50 = 11000 mg/l 96h Leuciscus idus: LC50 = 11300 mg/L/48h Salmo gairdneri: LC50 = 6100 mg/L/24h	EC50 = 8800 mg/L/48h EC50 = 12700 mg/L/48h EC50 = 12600 mg/L/48h	NOEC = 430 mg/l (algae; 96 h)	EC50 = 14500 mg/L/15 min
Ethyl alcohol	Fathead minnow (Pimephales promelas) LC50 = 14200 mg/l/96h	EC50 = 9268 mg/L/48h EC50 = 10800 mg/L/24h	EC50 (72h) = 275 mg/l (Chlorella vulgaris)	Photobacterium phosphoreum: EC50 = 34634 mg/L/30 min Photobacterium phosphoreum: EC50 = 35470 mg/L/5 min

### Persistence and Degradability

Readily biodegradable

#### Persistence

Persistence is unlikely, based on information available.

Component	Degradability
Acetone 67-64-1 ( 35 )	91 % (28 d) (OECD 301 B)
Ethyl alcohol 64-17-5 ( 20 )	OECD 301E = 94%

### Bioaccumulative Potential

Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Acetone	-0.24	0.69 dimensionless
Ethyl alcohol	-0.32	No data available
Propane	1.09	No data available
Butane	2.31	No data available

### Mobility in soil

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. Will likely be mobile in the environment due to its volatility. Disperses rapidly in air.

### Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

### 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

### Waste from Residues/Unused Products

Waste is classified as hazardous. Pressurized container: Do not pierce or burn, even after use. 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.

### Other Information

Waste codes should be assigned by the user based on the application for which the product was used. Do not flush to sewer.

## SECTION 14. TRANSPORT INFORMATION

### Road and Rail Transport

#### UN-No

UN1950

#### Proper Shipping Name

Aerosols



# SAFETY DATA SHEET

## Yttrium(III) oxide, Aerosol Refractory Paint

**Hazard Class** 2.1  
**Subsidiary Hazard Class** 5F

### IMDG/IMO

**UN-No** UN1950  
**Proper Shipping Name** AEROSOLS  
**Hazard Class** 2.1

### IATA

**UN-No** UN1950  
**Proper Shipping Name** AEROSOLS, FLAMMABLE  
**Hazard Class** 2.1

**Special Precautions for User** No special precautions required

## SECTION 15. REGULATORY INFORMATION

### International Inventories

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

Component	The Inventory of Hazardous Chemicals (2015 Edition)	List of dangerous goods GB 12268 - 2012	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
Acetone	X	X	X	X	200-662-2	X	X	X	X	X	X	KE-29367
Yttrium oxide (Y <sub>2</sub> O <sub>3</sub> )	-	-	X	X	215-233-5	X	X	X	X	X	X	KE-35504
Ethyl alcohol	X	X	X	X	200-578-6	X	X	X	X	X	X	KE-13217
Propane	X	X	X	X	200-827-9	X	X	X	X	X	X	KE-29258
Butane	X	X	X	X	203-448-7	X	X	X	X	X	X	KE-03751

### National Regulations

## SECTION 16. OTHER INFORMATION

**Prepared By** Health, Safety and Environmental Department  
**Creation Date** 15-Mar-2018  
**Revision Date** 12-May-2024  
**Revision Summary** New emergency telephone response service provider.

### 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.

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

### Legend

# SAFETY DATA SHEET

## Yttrium(III) oxide, Aerosol Refractory Paint

**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

**PNEC** - Predicted No Effect Concentration

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

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

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

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

**BCF** - Bioconcentration factor

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

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

**ATE** - Acute Toxicity Estimate

**VOC** - (Volatile Organic Compound)

### Key literature references and sources for data

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

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

### 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**