SAFETY DATA SHEET

Creation Date Oct-2013 **Revision Date** Oct-2018 **Revision Number** 2

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

1.1. Product identification

Product Description:	**Antimony trioxide**
Product Grade:	SQ
Cat No. :	Q21555
Synonyms	Antimony trioxide
CAS-No	1309-64-4
EC-No.	215-175-0
Molecular Formula	O3 Sb2

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	Thermo Fisher Scientific India Pvt. Ltd 403-404, B-wing, Delphi, Hiranandani Business Park, Powai, Mumbai 400076, INDIA.
E-mail address	laboratorysolutions@thermofisher.com

1.4. Emergency telephone number

India Toll Free: 18 00 22 22 30
Chemtrec US: (800) 424-9300
Chemtrec EU: 001 (202) 483-7616

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP Classification - Regulation (EC) No 1272/2008

Physical hazards

Based on available data, the classification criteria are not met

Health hazards

Carcinogenicity — Category 2 (H351)

Environmental hazards

Based on available data, the classification criteria are not met

2.2. Label elements

Signal Word **Warning**

Hazard Statements

H351 - Suspected of causing cancer

Precautionary Statements

P281 - Use personal protective equipment as required
P273 - Avoid release to the environment
P260 - Do not breathe dust/fume/gas/mist/vapors/spray

2.3. Other hazards

No information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Component	CAS-No	EC-No.	Weight %	CLP Classification - Regulation (EC) No 1272/2008
Lead monoxide	1317-36-8	EEC No. 215-267-0	<0.1	Acute Tox. 4 (H302) Acute Tox. 4 (H332) Repr. 1A (H360Df) STOT RE 1 (H372) Carc. 2 (H351) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Arsenic trioxide	1327-53-3	EEC No. 215-481-4	<0.1	Acute Tox. 2 (H300) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Carc. 1A (H350) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Antimony trioxide	1309-64-4	EEC No. 215-175-0	>95	Carc. 2 (H351)

Component	Reach Registration Number	
Antimony trioxide	01-2119475613-35	

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

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. Obtain medical attention.

Ingestion Do not induce vomiting. Obtain medical attention.

Inhalation Move to fresh air. Obtain medical attention. If not breathing, give artificial respiration.

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

No information available.

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
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media which must not be used for safety reasons
No information available.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products
Antimony oxide.

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. Avoid dust formation.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Should not be released into the environment. Do not allow material to contaminate ground water system.

6.3. Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

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. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not breathe dust. Use only under a chemical fume hood.

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 before re-use. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits
List source(s): **UK** - EH40/2005 Containing the workplace exposure limits (WELs) for use with the Control of Substances Hazardous to Health Regulations (COSHH) 2002 (as amended). Updated by September 2006 official press release and October 2007 Supplement.

Component	European Union	The United Kingdom	France	Belgium	Spain
Lead monoxide		STEL: 0.45 mg/m³ 15 min TWA: 0.15 mg/m³ 8 hr	TWA / VME: 0.1 mg/m³ (8 heures). restrictive limit		TWA / VLA-ED: 0.15 mg/m³ (8 horas)
Arsenic trioxide		STEL: 0.3 mg/m³ 15 min TWA: 0.1 mg/m³ 8 hr	TWA / VME: 0.2 mg/m³ (8 heures).		TWA / VLA-ED: 0.01 mg/m³ (8 horas)
Antimony trioxide		STEL: 1.5 mg/m³ 15 min TWA: 0.5 mg/m³ 8 hr	TWA / VME: 0.5 mg/m³ (8 heures).		TWA / VLA-ED: 0.5 mg/m³ (8 horas)

Component	Italy	Germany	Portugal	The Netherlands	Finland
Lead monoxide			TWA: 0.05 mg/m³ 8 horas		
Arsenic trioxide		Haut	TWA: 0.01 mg/m³ 8 horas	TWA: 0.0028 mg/m³ 8 uren	TWA: 0.01 ppm 8 tunteina
Antimony trioxide			TWA: 0.5 mg/m³ 8 horas		TWA: 0.5 mg/m³ 8 tunteina

Component	Austria	Denmark	Switzerland	Poland	Norway
Lead monoxide	MAK-KZW: 0.4 mg/m³ 15 Minuten MAK-TMW: 0.1 mg/m³ 8 Stunden		STEL: 0.8 mg/m³ 15 Minuten TWA: 0.1 mg/m³ 8 Stunden		TWA: 0.05 mg/m³ 8 timer
Arsenic trioxide	TRK-KZW: 0.4 mg/m³ 15 Minuten TRK-TMW: 0.1 mg/m³		Haut/Peau TWA: 0.1 mg/m³ 8 Stunden		TWA: 0.01 mg/m³ 8 timer

Antimony trioxide	TRK-KZW: 1.2 mg/m³ 15 Minuten TRK-KZW: 0.4 mg/m³ 15 Minuten TRK-TMW: 0.3 mg/m³ TRK-TMW: 0.1 mg/m³ MAK-KZW: 1.5 mg/m³ 15 Minuten MAK-TMW: 0.5 mg/m³ 8 Stunden		TWA: 0.1 mg/m³ 8 Stunden		TWA: 0.5 mg/m³ 8 timer

Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Arsenic trioxide	TWA: 0.05 mg/m³	kože TWA-GVI: 0.1 mg/m³ 8 satima. As			
Antimony trioxide		TWA-GVI: 0.5 mg/m³ 8 satima. Sb			TWA: 0.1 mg/m³ 8 hodinách. Sb Ceiling: 0.2 mg/m³ Sb

Component	Estonia	Gibraltar	Greece	Hungary	Iceland
Arsenic trioxide				Ceiling: 0.1 mg/m³ MK	
Antimony trioxide				STEL: 0.4 mg/m³ 15 percekben. CK TWA: 0.1 mg/m³ 8 órában. AK	

Component	Latvia	Lithuania	Luxembourg	Malta	Romania
Antimony trioxide	TWA: 1 mg/m³				

Component	Russia	Slovak Republic	Slovenia	Sweden	Turkey
Lead monoxide				LLV: 0.1 mg/m³ 8 timmar. inhalable dust LLV: 0.05 mg/m³ 8 timmar. respirable dust	
Arsenic trioxide		TWA: 0.1 mg/m³ 8 hodinách STEL: 0.5 mg/m³ 15 minútach	TWA: 0.1 mg/m³ 8 urah inhalable fraction STEL: 0.4 mg/m³ 15 minutah inhalable fraction		
Antimony trioxide	MAC: 1 mg/m³	TWA: 0.5 mg/m³	TWA: 0.3 mg/m³ 8 urah inhalable fraction TWA: 0.1 mg/m³ 8 urah inhalable fraction STEL: 1.2 mg/m³ 15 minutah manufacture inhalable fraction STEL: 0.4 mg/m³ 15 minutah other inhalable fraction	LLV: 0.25 mg/m³ 8 timmar.	

Biological limit values

List source(s):

Component	European Union	United Kingdom	France	Spain	Germany
Lead monoxide			Lead: 400 µg/L blood Lead: 300 µg/L blood Lead: 200 µg/L blood Lead: 100 µg/L blood		
Arsenic trioxide			Metabolites of inorganic Arsenic: 0.05 mg/g creatinine urine end of workweek		

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.
MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust
MDHS 99 Metals in air by ICP-AES
MDHS 91 Metals and metalloids in workplace air by X-ray fluorescence spectrometry

Derived No Effect Level (DNEL) No information available

Route of exposure	Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Oral				
Dermal				
Inhalation				

Predicted No Effect Concentration (PNEC) No information available.

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 only under a chemical fume hood.
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 Safety glasses with side-shields (European standard - EN 166)

Hand Protection Protective gloves

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

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure

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.
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

Environmental exposure controls Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	White	
Physical State	Powder Solid	
Odor	Odorless	
Odor Threshold	No data available	
pH	No information available	
Melting Point/Range	656 °C / 1212.8 °F	
Softening Point	No data available	
Boiling Point/Range	1550 °C / 2822 °F	@ 760 mmHg
Flash Point	No information available	**Method -** No information available
Evaporation Rate	Not applicable	Solid
Flammability (solid,gas)	No information available	
Explosion Limits	No data available	
Vapor Pressure	1.3 hPa @ 574 °C	
Vapor Density	Not applicable	Solid
Specific Gravity / Density	No data available	
Bulk Density	No data available **Water**	
Solubility	Insoluble in water **Solubility in**	
other solvents	No information available	
Partition Coefficient (n-octanol/water)		
Component	**log Pow**	
Arsenic trioxide	18.1	
Autoignition Temperature	Not applicable	
Decomposition Temperature	No data available	
Viscosity	Not applicable	Solid
Explosive Properties	No information available	
Oxidizing Properties	No information available	

9.2. Other information

Molecular Formula	O3 Sb2
Molecular Weight	291.42

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

None known, based on information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

10.4. Conditions to avoid

Avoid dust formation. Incompatible products. Excess heat.

10.5. Incompatible materials

Strong acids. Strong bases. Reducing agents. Strong oxidizing agents.

10.6. Hazardous decomposition products

Antimony oxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Product Information

(a) acute toxicity;

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

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Lead monoxide	LD50 > 10000 mg/kg (Rat)		
Arsenic trioxide	LD50 = 20 mg/kg (Rat)		
Antimony trioxide	LD50 > 34600 mg/kg (Rat)		

(b) skin corrosion/irritation; Based on available data, the classification criteria are not met

(c) serious eye damage/irritation; Based on available data, the classification criteria are not met

(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; Category 2

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

Component	EU	UK	Germany	IARC
Lead monoxide				Group 2A
Arsenic trioxide	Carc Cat. 1A		Cat. 1	Group 1
Antimony trioxide				Group 2B

(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

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

Target Organs None known.

(j) aspiration hazard; Not applicable
Solid

Symptoms / effects,both acute and No information available

delayed

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity effects Contains a substance which is:. Very toxic to aquatic organisms. The product contains following substances which are hazardous for the environment. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Lead monoxide	Pimephales promelas: LC50=0.3 mg/L 96h	EC50=0.13 mg/L 48h		
Arsenic trioxide	LC50: > 1000 mg/L, 96h static (Oncorhynchus mykiss) LC50: 18.8 - 21.4 mg/L, 96h flow-through (Oncorhynchus mykiss) LC50: = 135 mg/L, 96h (Pimephales promelas)	EC50 = 0.038 mg/L 24h EC50 = 0.96 mg/L 96h EC50 = 0.038 mg/L 24h		EC50 = 31.43 mg/L 60 min EC50 = 33.39 mg/L 30 min EC50 = 43.56 mg/L 15 min EC50 = 73.73 mg/L 5 min
Antimony trioxide	LC50 >1000 mg/L/96h (Brachydanio rerio)	EC50: > 1000 mg/L, 48h (Daphnia magna) EC50: 361.5 - 496.0 mg/L, 48h Static (Daphnia magna)	EC50: 0.63 - 0.8 mg/L, 72h (Pseudokirchneriella subcapitata) EC50: 0.65 - 0.81 mg/L, 96h (Pseudokirchneriella subcapitata)	EC50 > 3.5 mg/L 7 h

12.2. Persistence and degradability The product includes heavy metals. Prevent release into the environment. Special pretreatment required

Persistence based on information available, May persist, Insoluble in water.

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 May have some potential to bioaccumulate; Product has a high potential to bioconcentrate

Component	log Pow	Bioconcentration factor (BCF)
Arsenic trioxide	18.1	80 - 236

12.4. Mobility in soil The product is water soluble, and may spread in water systems Spillage unlikely to penetrate soil Will likely be mobile in the environment due to its water solubility. Is not likely mobile in the environment due its low water solubility. Highly mobile in soils

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

12.6. Other adverse effects

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

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 Catalogue, Waste Codes are not product specific, but application specific.
Other Information	Do not dispose of waste into 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 Not regulated

14.1. UN number
14.2. UN proper shipping name
14.3. Transport hazard class(es)
14.4. Packing group

ADR Not regulated

14.1. UN number
14.2. UN proper shipping name
14.3. Transport hazard class(es)
14.4. Packing group

IATA Not regulated

14.1. UN number
14.2. UN proper shipping name
14.3. Transport hazard class(es)
14.4. Packing group

14.5. Environmental hazards No hazards identified

14.6. Special precautions for user No special precautions required

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable, packaged goods

SECTION 15: REGULATORY INFORMATION

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

International Inventories X = listed

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	IECSC	AICS	KECL
Lead monoxide	215-267-0	-		X	X	-	X	X	X	X	X
Arsenic trioxide	215-481-4	-		X	X	-	X	X	X	X	X
Antimony trioxide	215-175-0	-		X	X	-	X	X	X	X	X

Component	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)
Lead monoxide			SVHC Candidate list - Toxic for reproduction (Article 57 c)

Arsenic trioxide	Carcinogenic Category 1A, Article 57 Application date: November 21, 2013 Sunset date: May 21, 2015 Exemption - None	Use restricted. See item 28. (see *http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006R1907:EN:NOT* for restriction details)	SVHC Candidate list - 215-481-4 - Carcinogenic, Article 57a

Component	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
Arsenic trioxide		0.1 tonne

National Regulations

Component	Germany - Water Classification (VwVwS)	Germany - TA-Luft Class
Lead monoxide	WGK 3	
Arsenic trioxide	WGK 3	
Antimony trioxide	WGK 2 WGK 1	

Component	France - INRS (Tables of occupational diseases)
Lead monoxide	Tableaux des maladies professionnelles (TMP) - RG 1
Arsenic trioxide	Tableaux des maladies professionnelles (TMP) - RG 20,RG 20bis
Antimony trioxide	Tableaux des maladies professionnelles (TMP) - RG 73

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

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

H351 - Suspected of causing cancer
H300 - Fatal if swallowed
H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H332 - Harmful if inhaled
H350 - May cause cancer
H360Df - May damage the unborn child. Suspected of damaging fertility
H372 - Causes damage to organs through prolonged or repeated exposure
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

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%

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

PNEC - Predicted No Effect Concentration

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% **NOEC** - No Observed Effect Concentration

POW - Partition coefficient Octanol:Water **PBT** - Persistent, Bioaccumulative, Toxic

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
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 Compounds

Key literature references and sources for data
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.

Creation Date	Oct-2013
Next Revision Date	Oct-2023
Revision Summary	SDS section 1 updated and update to Format.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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