

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: Lead (II) acetate basic

Product Grade: SQ

**Cat No. :** Q25007, Q25008

Synonyms Basic lead acetate, Lead subacetate

**CAS-No** 1335-32-6 **Molecular Formula** C4 H10 O8 Pb3

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

Recommended Use Laboratory chemicals.
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 <u>laboratorysolutions@thermofisher.com</u>

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**

CarcinogenicityCategory 2 (H351)Reproductive ToxicityCategory 1A (H360Df)Specific target organ toxicity - (repeated exposure)Category 2 (H373)

## **Environmental hazards**

Acute aquatic toxicity
Chronic aquatic toxicity
Category 1 (H400)
Category 1 (H410)

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## 2.2. Label elements



Signal Word

**Danger** 

#### **Hazard Statements**

H351 - Suspected of causing cancer

H360Df - May damage the unborn child. Suspected of damaging fertility

H373 - May cause damage to organs through prolonged or repeated exposure

H410 - Very toxic to aquatic life with long lasting effects

May form combustible dust concentrations in air

## **Precautionary Statements**

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P201 - Obtain special instructions before use

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

P308 + P313 - IF exposed or concerned: Get medical advice/ attention

P273 - Avoid release to the environment

## Additional EU labelling

Restricted to professional users

## 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 subacetate	1335-32-6	EEC No. 215-630-3	100	Carc. 2 (H351) Repr. 1A (H360Df) STOT RE 2 (H373) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)

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.

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Obtain medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention

immediately if symptoms occur.

**Ingestion** Do not induce vomiting. Obtain medical attention.

**Inhalation**Move to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the

substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. If

not breathing, give artificial respiration.

Protection of First-aiders 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

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

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

No information available.

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

Dust can form an explosive mixture in air. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition. Fine dust dispersed in air may ignite. Do not allow run-off from fire fighting to enter drains or water courses.

#### **Hazardous Combustion Products**

lead oxides, lead.

## 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. Avoid dust formation. Remove all sources of ignition. Keep people away from and upwind of spill/leak.

#### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. Should not be

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released into the environment.

## 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. Prevent product from entering drains. Do not let this chemical enter the environment.

#### 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

Use only under a chemical fume hood. Wear personal protective equipment. Avoid dust formation. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Handle under inert gas, protect from moisture.

#### **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 in a dry, cool and well-ventilated place. Keep container tightly closed.

## 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 subacetate		STEL: 0.45 mg/m <sup>3</sup> 15	TWA / VME: 0.1 mg/m <sup>3</sup>		
		min	(8 heures). restrictive		
		TWA: 0.15 mg/m <sup>3</sup> 8 hr	limit		

Component	Austria	Denmark	Switzerland	Poland	Norway
Lead subacetate	MAK-KZW: 0.4 mg/m <sup>3</sup> 15 Minuten MAK-TMW: 0.1 mg/m <sup>3</sup> 8		STEL: 0.8 mg/m³ 15 Minuten TWA: 0.1 mg/m³ 8		TWA: 0.05 mg/m <sup>3</sup> 8 timer STEL: 0.15 mg/m <sup>3</sup> 15
	Stunden		Stunden		minutter. value calculated Pb

#### **Biological limit values**

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

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regulatory bodies.

## 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

MDHS6/3 Lead and inorganic compounds of lead in air Laboratory method using flame or electrothermal atomic absorption 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 No information available. (PNEC)

#### 8.2. Exposure controls

## **Engineering Measures**

Use only under a chemical fume hood. 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 tin Natural rubber See manufacture Nitrile rubber recommendation Neoprene PVC	rs -	<b>EU standard</b> EN 374	Glove comments (minimum requirement)
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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

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Recommended Filter type: Particulates filter conforming to EN 143

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

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

Recommended half mask:- Particle filtering: EN149:2001 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.

Solid

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

## 9.1. Information on basic physical and chemical properties

White **Appearance** 

Powder Solid **Physical State** 

Odor Odorless

**Odor Threshold** No data available На 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

**Evaporation Rate** Not applicable Solid

Flammability (solid,gas) No information available

**Explosion Limits** No data available

No information available Vapor Pressure

Vapor Density Not applicable Solid

Specific Gravity / Density No data available **Bulk Density** No data available

Water Solubility 62.5 g/L

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Not applicable **Autoignition Temperature Decomposition Temperature** No data available **Viscosity** Not applicable

**Explosive Properties** No information available **Oxidizing Properties** No information available

## 9.2. Other information

Molecular Formula C4 H10 O8 Pb3 **Molecular Weight** 807.69

## **SECTION 10: STABILITY AND REACTIVITY**

10.1. Reactivity None known, based on information available

10.2. Chemical stability

Stable under normal conditions. Air sensitive.

#### 10.3. Possibility of hazardous reactions

**Hazardous Polymerization** Hazardous polymerization does not occur.

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Hazardous Reactions

No information available.

10.4. Conditions to avoid

Exposure to air. Incompatible products.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids.

## 10.6. Hazardous decomposition products

lead oxides. lead.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

## 11.1. Information on toxicological effects

Product Information No acute toxicity information is available for this product

(a) acute toxicity;

OralNo data availableDermalNo data availableInhalationNo data available

(b) skin corrosion/irritation; No data available

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

(d) respiratory or skin sensitization;

**Respiratory** No data available **Skin** No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; Category 2

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; Category 1A

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; Category 2

Target OrgansNo information available.

(j) aspiration hazard; Not applicable

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Symptoms / effects,both acute and No information available delayed

## **SECTION 12: ECOLOGICAL INFORMATION**

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12.1. Toxicity

**Ecotoxicity effects**Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment. Do not allow material to contaminate ground water system.

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

pretreatment required

**Persistence** May persist, based on information available.

Degradability

Not relevant for inorganic substances.

Degradation in sewage

Contains substances known to be hazardous to the environment or not degradable in waste

Degradation in sewage Contains substances kr treatment plant water treatment plants.

12.3. Bioaccumulative potential May have some potential to bioaccumulate

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

environment due to its 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 Persistent Organic Pollutant Ozone Depletion Potential This product does not contain any known or suspected endocrine disruptors

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** 

Should not be released into the environment. 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. Do not let this

chemical enter the environment.

## **SECTION 14: TRANSPORT INFORMATION**

## IMDG/IMO

**14.1. UN number** UN1616

**14.2. UN proper shipping name** LEAD ACETATE

14.3. Transport hazard class(es) 6.1 14.4. Packing group III

<u>ADR</u>

**14.1. UN number** UN1616

14.2. UN proper shipping name LEAD ACETATE

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14.3. Transport hazard class(es) 6.1 14.4. Packing group III

<u>IATA</u>

**14.1. UN number** UN1616

14.2. UN proper shipping name LEAD ACETATE

**14.3. Transport hazard class(es)** 6.1 **14.4. Packing group** 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. Transport in bulk according to Not applicable, packaged goods

Annex II of MARPOL73/78 and the

**IBC Code** 

## **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	1
Lead subacetate	215-630-3	-		Х	X	-	X	X	X	X	-	l

Component	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	O v
Lead subacetate		Use restricted. See item 30.	
		(see	
		http://eur-lex.europa.eu/LexUriServ/L	
		exUriServ.do?uri=CELEX:32006R190	
		7:EN:NOT for restriction details)	

## **National Regulations**

Component	Germany - Water Classification (VwVwS)	Germany - TA-Luft Class
Lead subacetate		Class I : 20 mg/m³ (Massenkonzentration)

Ī	Component	France - INRS (Tables of occupational diseases)
	Lead subacetate	Tableaux des maladies professionnelles (TMP) - RG 1

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

Take note of Dir 94/33/EC on the protection of young people at work

Take note of Dir 92/85/EC on the protection of pregnant and breastfeeding women at work

## 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

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H351 - Suspected of causing cancer

H360Df - May damage the unborn child. Suspected of damaging fertility

H373 - May cause 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 TSCA - United States Toxic Substances Control Act Section 8(b)

Inventory

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

Substances/EU List of Notified Chemical Substances Substances List

**ENCS** - Japanese Existing and New Chemical Substances **PICCS** - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances AICS - Australian Inventory of 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% No Observed Effect Concentration

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

NZIoC - New Zealand Inventory of Chemicals

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 -POW - Partition coefficient Octanol:Water PBT -

vPvB - very Persistent, very Bioaccumulative

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

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 hvaiene.

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

SDS section 1 updated and update of Format. **Revision Summary** 

## This safety datasheet 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**

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	US DOT	Canada TDG	IATA
Shipping Name:	ALCOHOLS, N.O.S. (Isopropanol)	ALCOHOLS, N.O.S. (Isopropanol)	ALCOHOLS, N.O.S. (Isopropanol)
Hazard Class:	3	3	3
UN Number:	UN1987	UN1987	UN1987
Packing Group:	II	II	II