Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 06/29/2015 Revision date: Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. **Product identifier**

Product form : Substance (UVCB)

Substance name Lanthanum Strontium Cobalt Oxide

EC no 266-340-9 CAS No 66402-68-4

Other means of identification Ceramic Materials and Wares

LSC

Lanthanum strontium cobaltite

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals; Manufacture of substances.

Uses advised against 1.2.2.

No additional information available

1.3. Details of the supplier of the safety data sheet

Nexceris, LLC 404 Enterprise Drive Lewis Center, Ohio 43035 - USA T 614-842-6606

http://www.nexceris.com

1.4. **Emergency telephone number**

Emergency number : Infotrac US & Canada: 1-800-535-5053 Global: 1-352-323-3500

Country	Official advisory body	Address	Emergency number
IRELAND (REPUBLIC OF)	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2166 (public, 8am - 10pm, 7/7)
UNITED KINGDOM	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Resp. Sens. 1 H334

Full text of H-phrases: see section 16

Adverse physicochemical, human health and environmental effects

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP) : Danger.

Hazard statements (CLP) : H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary statements (CLP) : P261 - Avoid breathing dust

P284 - Wear respiratory protection

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER/doctor

P501 - Dispose in a safe manner in accordance with local/national regulations.

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Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. **Substances**

Substance type : UVCB

: Lanthanum Strontium Cobalt Oxide Name

CAS No 66402-68-4 EC no 266-340-9

Name	Product identifier	%
Lanthanum Strontium Cohalt Oxide	(CAS No) 66402-68-4 (EC no) 266-340-9	100

Full text of H- and EUH-phrases: see section 16

Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position

comfortable for breathing.

First-aid measures after skin contact Remove affected clothing and wash all exposed skin area with mild soap and water, followed by

warm water rinse.

First-aid measures after eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting unless directed to do so by medical personnel.

Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

: Symptoms may include pain, blinking, tears and redness. Symptoms/injuries after eye contact

Indication of any immediate medical attention and special treatment needed

All treatments should be based on observed signs and symptoms of distress in the patient.

SECTION 5: Firefighting measures

5.1. **Extinguishing media**

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None known.

Special hazards arising from the substance or mixture 5.2.

No additional information available

Advice for firefighters 5.3.

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Wear fire/flame resistant/retardant clothing. Wear a self-contained breathing apparatus. EN469.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

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6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Chemical goggles or safety glasses. Avoid

breathing dust.

Emergency procedures : Ventilate area

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Handle in a well-ventilated area.

Hygiene measures : Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place.

7.3. Specific end use(s)

Laboratory chemicals; manufacture of substances.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Tricobalt tetraoxide (1308-06-1)		
Finland	HTP-arvo (8h) (mg/m3)	0.02 mg/m ³
Finland	Huomautus (FI)	(Co)

Cobalt oxides		
United Kingdom	WEL TWA (mg/m³)	0.1 mg/m³
United Kingdom	Remark (WEL)	includes compounds, as Co, MDHS 30/2 (reference to measurement method), applies to cobalt dichloride and cobalt sulphate, asthmagen, Sen notation

8.2. Exposure controls

Appropriate engineering controls : Avoid dispersal of dust in the air (ie, clearing dust surfaces with compressed air). Ensure good

ventilation of the work station.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Dust impervious gloves. EN374

Eye protection : Chemical goggles or safety glasses. In case of dust production: protective goggles. EN166

Respiratory protection : Where excessive dust may result, use approved respiratory protection equipment. Use air-

purifying respirator equipped with particulate filtering cartridges. Filtering Half-face mask (DIN EN

149)

Other information : When using, do not eat, drink or smoke.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

: Solid Physical state Appearance Powder. Colour : Black - grey. Odour : Odourless. Odour threshold : No data available рΗ : Not applicable Relative evaporation rate (butylacetate=1) : Not applicable Melting point : No data available : No data available Freezing point : Not applicable Boiling point Flash point : Not applicable : Not applicable Self ignition temperature Decomposition temperature No data available Flammability (solid, gas) : Non flammable Vapour pressure : Not applicable Relative vapour density at 20 ℃ : No data available Relative density : No data available Solubility : insoluble in water. Log Pow : No data available Viscosity, kinematic : Not applicable Viscosity, dynamic No data available Explosive properties : Product is not explosive. Oxidising properties : No oxidizing properties.

: No data available

9.2. Other information

VOC content : 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Explosive limits

No dangerous reactions known.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Oxides.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified Skin corrosion/irritation : Not classified. Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

Lanthanum Strontium Cobalt Oxide (66402-68-4)			
Persistence and degradability	Not established		

12.3. Bioaccumulative potential

Lanthanum Strontium Cobalt Oxide (66402-68-4)	
Bioaccumulative potential	Not established

12.4. Mobility in soil

No additional information available.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

Not considered a dangerous good for transport regulations

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

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IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

14.6.1. Overland transport: None14.6.2. Transport by sea: None14.6.3. Air transport: None

14.6.4. Inland waterway transport

Not subjected to ADN : No

14.6.5. Rail transport

Carriage prohibited (RID) : No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Lanthanum Strontium Cobalt Oxide is not on the REACH Candidate List

Contains no REACH candidate substance

Lanthanum Strontium Cobalt Oxide is not on the REACH Annex XIV List

Contains no REACH Annex XIV substances.

VOC content : 0 %

15.1.2. National regulations

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Germany

Water hazard class (WGK) : 1 - slightly hazardous to water

WGK remark : Classification based on the components in compliance with Verwaltungsvorschrift

wassergefährdender Stoffe (VwVwS)

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15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Original Document.

Abbreviations and acronyms:

CAS (Chemical Abstracts Service) number.

GHS: Globally Harmonized System (of Classification and Labeling) of Chemicals

OSHA: Occupational Safety & Health Administration

TSCA: Toxic Substances Control Act

Data sources

: Chemical Inspection & Regulation Service; accessed at: http://www.cirs-reach.com/Inventory/Global Chemical Inventories.html.

Component Supplier SDSs.

ESIS (European chemincal Substances Information System; accessed at:

http://esis.jrc.ec.europa.eu/index.php?PGM=cla

European Chemicals Agency (ECHA) Registered Substances list.

Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing",

Fifth Edition.

National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th

edition.

The Organisation for Economic Co-operation and Development (OECD; eChemPortal chemical

searches. Accessed at

http://www.echemportal.org/echemportal/substancesearch/substancesearchlink.action.

TSCA Chemical Substance Inventory. Accessed at

http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html.

Other information : None.

Full text of H- and EUH-phrases::

· an text of the and zero prince con		
Resp. Sens. 1	Respiratory sensitisation Category 1	
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled	

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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