



SAFETY DATA SHEET

Revision Date 11-Oct-2011

Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Description:

Lead(II) perchlorate trihydrate

Cat No.

447780000; 447781000; 447785000

Synonyms

Perchloric acid, lead(2+) salt, trihydrate.

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

Recommended Use

Laboratory chemicals

Uses advised against

No Information available

Details of the supplier of the safety data sheet

Company

Acros Organics BVBA
Janssen Pharmaceuticaaan 3a
2440 Geel, Belgium

E-mail address

begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01

For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300

CHEMTREC Phone Number, Europe: 001-703-527-3887

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 4
Reproductive Toxicity	Category 1A
Specific target organ systemic toxicity (repeated exposure)	Category 2
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1
Oxidizing solids.	Category 2

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R phrases mentioned in this Section, see Section 16

Symbol(s)

O - Oxidizing

T - Toxic

N - Dangerous for the environment

R-phrases(s)

R61 - May cause harm to the unborn child

R62 - Possible risk of impaired fertility

R 8 - Contact with combustible material may cause fire

R33 - Danger of cumulative effects

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2. HAZARDS IDENTIFICATION

Risk Combination Phrases

R20/22 - Harmful by inhalation and if swallowed
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Label Elements



Signal Word

Danger

Hazard Statements

H332 - Harmful if inhaled
H373 - May cause damage to organs through prolonged or repeated exposure
H302 - Harmful if swallowed
H410 - Very toxic to aquatic life with long lasting effects
H360Df - May damage the unborn child. Suspected of damaging fertility
H272 - May intensify fire; oxidizer

Precautionary Statements - EU (§28, 1272/2008)

P308 + P313 - IF exposed or concerned: Get medical advice/ attention
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell
P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P273 - Avoid release to the environment

Other Hazards

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS



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Component	EC-No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
Tribasic lead perchlorate 13453-62-8		>95	13453-62-8	Xn; R20/22 R33 N; R50-53 Repr.Cat.1; R61 Repr.Cat.3; R62 O;R8	Acute Tox. 4 (H302) Acute Tox. 4 (H332) Repr. 1A (H360Df) STOT RE 2 (H373) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Ox. Sol. 2 (H272)	-

For the full text of the R phrases mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of first aid measures

Eye Contact

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.

Ingestion

Never give anything by mouth to an unconscious person. Drink plenty of water. Call a physician immediately. If possible drink milk afterwards.

Inhalation

Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediate medical attention is required.

Notes to Physician

Treat symptomatically

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Oxidizer: Contact with combustible/organic material may cause fire.

Advice for fire-fighters



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As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

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

7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not breathe dust. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Use only in area provided with appropriate exhaust ventilation. Keep away from clothing and other combustible materials.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Do not store near combustible materials.

Specific End Uses

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Component
Tribasic lead
perchlorate

European Union	The United Kingdom	France	Belgium	Spain
	STEL: 0.45 mg/m ³ 15 min TWA: 0.15 mg/m ³ 8 hr	VME: 0.1 mg/m ³ 8 heures. restrictive limit Pb		VLA-ED: 0.15 mg/m ³ 8 horas

Component
Tribasic lead
perchlorate

Italy	Germany	Portugal	The Netherlands	Finland
		TWA: 0.05 mg/m ³ 8 horas		

Component
Tribasic lead
perchlorate

Austria	Denmark	Switzerland	Poland	Norway
STEL: 0.4 mg/m ³ 15 Minuten MAK: 0.1 mg/m ³ 8 Stunden		STEL: 0.8 mg/m ³ 15 Minuten MAK: 0.1 mg/m ³ 8 Stunden		TWA: 0.05 mg/m ³ 8 timer



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Biological limit values

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

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas Ventilation systems

Personal protective equipment

Eye Protection

Safety glasses with side-shields Goggles

Hand Protection

Protective gloves

Skin and body protection

Long sleeved clothing

Respiratory Protection

Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Solid

Appearance

Beige

odor

odorless

pH

3-5 5% aq.sol.

Vapor Density

No information available.

Boiling Point/Range

No information available.

Melting Point/Range

100°C / 212°F

Flash Point

No information available.

Autoignition Temperature

No information available.

Water Solubility

soluble

Specific Gravity

2.600

Molecular Formula

Cl₂ O₈ Pb . 3 H₂ O

Molecular Weight

460.14

10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability

Hygroscopic.

Possibility of Hazardous Reactions

Hazardous Polymerization

Hazardous polymerization does not occur.

Hazardous Reactions .

No information available.



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Conditions to Avoid

Incompatible products, Combustible material, Exposure to moist air or water.

Incompatible Materials

Strong oxidizing agents, Powdered metals.

Hazardous Decomposition Products

Lead oxides.. Hydrogen chloride gas.

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Product Information No acute toxicity information is available for this product

Component Information

Chronic Toxicity

Carcinogenicity Component

There are no known carcinogenic chemicals in this product

Tribasic lead perchlorate

IARC	UK
Group 2A	

Sensitization

No information available.

Mutagenic Effects

No information available

Reproductive Effects

No information available.

Developmental Effects

No information available.

Target Organs

No information available.

Other Adverse Effects

The toxicological properties have not been fully investigated.

Endocrine Disruptor Information

None known

12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity effects Do not empty into drains



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Persistence and degradability

Not readily biodegradable

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessment

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues / Unused Products

Dispose of in accordance with local regulations

Contaminated Packaging

Empty containers should be taken to local recyclers for disposal

14. TRANSPORT INFORMATION

IMDG/IMO

UN-No	1470
Hazard Class	5.1
Subsidiary Hazard Class	6.1
Packing Group	II
Proper Shipping Name	LEAD PERCHLORATE, SOLID

ADR

UN-No	1470
Hazard Class	5.1
Subsidiary Class	6.1
Packing Group	II
Proper Shipping Name	LEAD PERCHLORATE, SOLID

IATA

UN-No	1470
Hazard Class	5.1
Subsidiary Hazard Class	6.1



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14. TRANSPORT INFORMATION

Packing Group	II
Proper Shipping Name	LEAD PERCHLORATE, SOLID

15. REGULATORY INFORMATION

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

International Inventories

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory Lists
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances
CHINA - China Inventory of Existing Chemical Substances
AICS - Inventory of Chemical Substances
KECL - Existing and Evaluated Chemical Substances

Chemical Safety Assessment

16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R61 - May cause harm to the unborn child
R62 - Possible risk of impaired fertility
R 8 - Contact with combustible material may cause fire
R33 - Danger of cumulative effects
R20/22 - Harmful by inhalation and if swallowed
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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Revision Summary Not applicable

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

Disclaimer

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet