SAFETY DATA SHEET



1. Identification

Product identifier Lead antimonate

Other means of identification

Item NG-I3400 **CAS** number 13510-89-9

Recommended use For Laboratory Use Only

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Chem Service. Inc. Company name 660 Tower Lane **Address**

West Chester, PA 19380

United States

Toll Free Telephone 800-452-9994

> Direct 610-692-3026

Website www.chemservice.com E-mail info@chemservice.com

Chemtrec US 800-424-9300 **Emergency phone number**

Chemtrec outside US +1 703-527-3887

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Acute toxicity, oral Category 4

> Acute toxicity, inhalation Category 4 Carcinogenicity Category 1B Category 1A

Reproductive toxicity (fertility, the unborn

child)

Specific target organ toxicity, repeated Category 2

exposure

Environmental hazards Hazardous to the aquatic environment, acute Category 1

hazard

Hazardous to the aquatic environment, Category 1

long-term hazard

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Harmful if swallowed. Harmful if inhaled. May cause cancer. May damage the unborn child. May **Hazard statement**

damage fertility. May cause damage to organs through prolonged or repeated exposure. Very

toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell. If inhaled: Remove person to fresh air Response and keep comfortable for breathing. If exposed or concerned: Get medical advice/attention. Call a

poison center/doctor if you feel unwell. Rinse mouth. Collect spillage.

Material name: Lead antimonate NG-I3400 Version #: 02 Revision date: 10-29-2017 Issue date: 02-25-2015 Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information Not applicable.

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
Lead antimonate		13510-89-9	100

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or

artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact Rinse with water. Get medical attention if irritation develops and persists.

Eye contact

Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

Proportion

Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

Prolonged exposure may cause chronic effects.

Ingestion Rinse mouth. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

General information IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware

of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Specific hazards arising from

the chemical

Special protective equipment and precautions for firefighters

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

During fire, gases hazardous to health may be formed.

Use water spray to cool unopened containers.

Fire fighting

equipment/instructions

Specific methodsUse standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Environmental precautions

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Stop the flow of material, if this is without risk. Collect spillage.

Large Spills: Wet down with water and dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

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

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid

discharge into drains, water courses or onto the ground.

Material name: Lead antimonate SDS US

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Do not taste or swallow. Avoid breathing dust. Avoid contact during pregnancy/while nursing. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store in a well-ventilated place. Store

away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

Material	Туре	Value	
Lead antimonate (CAS 13510-89-9)	TWA	0.05 mg/m3	
US. OSHA Table Z-1 Limits for A	ir Contaminants (29 CFR 1910.	1000)	
Material	Туре	Value	
Lead antimonate (CAS 13510-89-9)	PEL	0.5 mg/m3	
US. NIOSH: Pocket Guide to Che	emical Hazards		
Material	Туре	Value	
Lead antimonate (CAS 13510-89-9)	TWA	0.5 mg/m3	

Biological limit values

ACGIH Biological Exposure Indices

Material	Value	Determinant	Specimen	Sampling Time
Lead antimonate (CAS 13510-89-9)	300 μg/l	Lead	Blood	*

^{* -} For sampling details, please see the source document.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection If contact is likely, safety glasses with side shields are recommended.

Skin protection

Hand protection For prolonged or repeated skin contact use suitable protective gloves.

Other Use personal protective equipment as required.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely

wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

range

Physical state Solid.

Form Solid. Crystalline Solid

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Color Orange-Yellow
Odor Not available.
Odor threshold Not available.

PH Not available.
Melting point/freezing point Not available.
Initial boiling point and boiling Not available.

Material name: Load antimenate

Material name: Lead antimonate sps us

Not available. Flash point Not available. **Evaporation rate** Not available. Flammability (solid, gas) Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%) Not available. Not available. Explosive limit - upper (%)

Vapor pressure Not available. Vapor density Not available. Not available. Relative density

Solubility(ies)

Not available. Solubility (water) Not available. Partition coefficient

(n-octanol/water)

Auto-ignition temperature Not available. **Decomposition temperature** Not available. Not available. **Viscosity**

Other information

6.58 g/ml Density Molecular formula O.Pb.Sb

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Harmful if inhaled.

Skin contact No adverse effects due to skin contact are expected. Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Harmful if inhaled. Harmful if swallowed. Acute toxicity

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Serious eye damage/eye

irritation

Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Not available. Respiratory sensitization

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Material name: Lead antimonate SDS US Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Lead antimonate (CAS 13510-89-9) 2A Probably carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Lead antimonate (CAS 13510-89-9) Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity May damage the unborn child. May damage fertility.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard Not available.

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. May cause

damage to organs through prolonged or repeated exposure.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential No data available. Mobility in soil No data available.

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation Other adverse effects

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material **Disposal instructions**

and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international

regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Empty containers should be taken to an approved waste handling site for recycling or disposal. Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

UN number

Antimony compound, inorganic, solid, n.o.s. (Lead antimonate) **UN proper shipping name**

Transport hazard class(es)

Class 6.1(PGIII)

Subsidiary risk Ш Packing group **Environmental hazards** No. 6L **ERG Code**

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

Allowed with restrictions.

aircraft Cargo aircraft only

Allowed with restrictions.

IMDG

UN1549 **UN number**

Material name: Lead antimonate SDS US 5/7 UN proper shipping name ANTIMONY COMPOUND, INORGANIC, SOLID, N.O.S. (Lead antimonate)

Transport hazard class(es)

6.1(PGIII) Class

Subsidiary risk Ш Packing group

Environmental hazards

Marine pollutant No. F-A, S-A **EmS**

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Not applicable.

Transport in bulk according to

Annex II of MARPOL 73/78 and the IBC Code

IATA; IMDG



15. Regulatory information

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication US federal regulations

Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Lead antimonate (CAS 13510-89-9) Reproductive toxicity

Central nervous system

Kidney Blood Acute toxicity

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Material name: Lead antimonate SDS US Safe Drinking Water Act

(SDWA)

0.006 mg/l

US state regulations

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Lead antimonate (CAS 13510-89-9) Listed: October 1, 1992

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing

Toxic Substances Control Act (TSCA) Inventory

16. Other information, including date of preparation or last revision

 Issue date
 02-25-2015

 Revision date
 10-29-2017

Version # 02

United States & Puerto Rico

Disclaimer The above information is believed to be correct on the date it was last revised and must not be

considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded SDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.

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This product is furnished FOR LABORATORY USE ONLY.

Revision information Physical and chemical properties: Color

Material name: Lead antimonate sps us

Yes

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).