

# **SAFETY DATA SHEET**

Creation Date 24-Aug-2009 Revision Date 30-Jan-2020 **Revision Number 2** 

1. Identification

**Product Name Lead Strip** 

Cat No.: C4711

**Synonyms** Lead Metal Any Form Laboratory chemicals.

**Recommended Use** No Information available

Uses advised against

Details of the supplier of the safety data sheet

Company **Emergency Telephone Number** 

Chemtrec US: (800) 424-9300

Chemtrec EU: 001 (202) 483-7616

Post Apple Scientific, inc.

8893 Gulf Rd

North East, PA 16428

Tel: 814-725-3330

# 2. Hazard(s) identification

# Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute oral toxicity Category 4 Acute Inhalation Toxicity - Dusts and Mists Category 4 Carcinogenicity Category 1A Reproductive Toxicity Category 1A Specific target organ toxicity - (repeated exposure) Category 2

Target Organs - Kidney, Liver, Blood.

## Label Elements

## Signal Word

Danger

## **Hazard Statements**

Harmful if swallowed Harmful if inhaled May cause cancer May damage fertility or the unborn child May cause damage to organs through prolonged or repeated exposure





#### **Precautionary Statements**

#### Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

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

Do not get in eyes, on skin, or on clothing

#### Response

IF exposed or concerned: Get medical attention/advice

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

#### Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

## **Storage**

Store locked up

# **Disposal**

Dispose of contents/container to an approved waste disposal plant

## Hazards not otherwise classified (HNOC)

Very toxic to aquatic life with long lasting effects

# 3. Composition / information on ingredients

Component	CAS-No	Weight %
Lead	7439-92-1	90 - 98.9
Antimony	7440-36-0	1 - 8
Arsenic	7440-38-2	0.1 - 2

# 4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required.

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

attention is required.

**Inhalation** Move to fresh air. If breathing is difficult, give oxygen. Immediate medical attention is

required. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the

substance; induce artificial respiration with a respiratory medical device.

**Ingestion** Do not induce vomiting. Call a physician or Poison Control Center immediately.

Most important symptoms/effects

Notes to Physician

No information available. Treat symptomatically

# 5. Fire-fighting measures

Suitable Extinguishing Media Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

Unsuitable Extinguishing Media No information available

Flash Point No information available Method - No information available

**Autoignition Temperature** 

**Explosion Limits** 

No information available

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

#### Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors.

#### **Hazardous Combustion Products**

lead oxides antimony oxide arsenic oxides

## **Protective Equipment and Precautions for Firefighters**

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

NFPA

HealthFlammabilityInstabilityPhysical hazards200N/A

## 6. Accidental release measures

**Personal Precautions** 

**Environmental Precautions** 

Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Should not be released into the environment. See Section 12 for additional ecological

information. Avoid release to the environment. Collect spillage.

**Methods for Containment and Clean** Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust **Up** formation.

# 7. Handling and storage

Handling

Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Do not breathe dust.

Storage

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

# 8. Exposure controls / personal protection

#### **Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lead	TWA: 0.05 mg/m <sup>3</sup>	TWA: 50 μg/m <sup>3</sup>	IDLH: 100 mg/m <sup>3</sup>
			TWA: 0.050 mg/m <sup>3</sup>
Antimony	TWA: 0.5 mg/m <sup>3</sup>	(Vacated) TWA: 0.5 mg/m <sup>3</sup>	IDLH: 50 mg/m <sup>3</sup>
		TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>
Arsenic	TWA: 0.01 mg/m <sup>3</sup>	(Vacated) TWA: 0.5 mg/m <sup>3</sup>	IDLH: 5 mg/m <sup>3</sup>
			Ceiling: 0.002 mg/m <sup>3</sup>

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Lead	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.15 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>
Antimony	TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>
Arsenic	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.01 mg/m <sup>3</sup>	TWA: 0.01 mg/m <sup>3</sup>
			STEL: 0.05 mg/m <sup>3</sup>

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

**Engineering Measures** 

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations

and safety showers are close to the workstation location.

**Personal Protective Equipment** 

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

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

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

> EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Handle in accordance with good industrial hygiene and safety practice. **Hygiene Measures** 

# 9. Physical and chemical properties

**Physical State** Solid **Appearance** Light blue Odor Odorless

**Odor Threshold** No information available

Not applicable

327.4 °C / 621.3 °F Melting Point/Range **Boiling Point/Range** 1740 °C / 3164 °F No information available Flash Point **Evaporation Rate** No information available Flammability (solid,gas) No information available

Flammability or explosive limits

Upper No data available Lower No data available 1.3 mmHg @ 970 °C **Vapor Pressure** Vapor Density No information available

**Relative Density** 

Solubility Insoluble in water No data available Partition coefficient; n-octanol/water **Autoignition Temperature** No information available **Decomposition Temperature** No information available No information available

Molecular Formula Pb 207.19 **Molecular Weight** 

# 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

Stability Stable under normal conditions.

**Conditions to Avoid** Avoid dust formation. Incompatible products.

Strong acids, Peroxides **Incompatible Materials** 

Hazardous Decomposition Products lead oxides, antimony oxide, arsenic oxides

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

**Hazardous Reactions** None under normal processing.

# 11. Toxicological information

**Acute Toxicity** 

**Viscosity** 

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Antimony	7 g/kg (Rat)	Not listed	Not listed
Arsenic	15 mg/kg (Rat) 763 mg/kg (Rat)	Not listed	Not listed

**Toxicologically Synergistic** 

No information available

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation May cause eye, skin, and respiratory tract irritation

Sensitization No information available

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

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Lead	7439-92-1	Group 2B	Reasonably Anticipated	A3	Х	A3
Antimony	7440-36-0	Not listed	Not listed	Not listed	Not listed	Not listed
Arsenic	7440-38-2	Group 1	Known	A1	X	A1

IARC: (International Agency for Research on Cancer)

NTP: (National Toxicity Program)

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human

Carcinogen

ACGIH: (American Conference of Governmental Industrial

Mexico - Occupational Exposure Limits - Carcinogens

Hygienists)

A1 - Known Human Carcinogen A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

ACGIH: (American Conference of Governmental Industrial Hygienists)

Mexico - Occupational Exposure Limits - Carcinogens

A1 - Confirmed Human Carcinogen A2 - Suspected Human Carcinogen A3 - Confirmed Animal Carcinogen

A4 - Not Classifiable as a Human Carcinogen A5 - Not Suspected as a Human Carcinogen

**Mutagenic Effects** Mutagenic effects have occurred in humans.

Experiments have shown reproductive toxicity effects on laboratory animals. **Reproductive Effects** 

**Developmental Effects** Developmental effects have occurred in experimental animals.

**Teratogenicity** Teratogenic effects have occurred in experimental animals.

STOT - single exposure None known STOT - repeated exposure Kidney Liver Blood

**Aspiration hazard** No information available

Symptoms / effects,both acute and No information available

delaved

**Endocrine Disruptor Information** No information available

Other Adverse Effects Tumorigenic effects have been reported in experimental animals. See actual entry in

RTECS for complete information.

## 12. Ecological information

**Ecotoxicity** 

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Lead	Not listed	1.32 mg/L LC50 96 h 1.17	Not listed	600 μg/L EC50 = 48 h
		mg/L LC50 96 h 0.44 mg/L		
		LC50 96 h		
Antimony	Not listed	Cyprinodon variegatus:	Not listed	Not listed
		LC50 = 6.2-8.3  mg/L/96h		

Persistence and Degradability Bioaccumulation/ Accumulation

No information available No information available.

Mobility

No information available.

# 13. Disposal considerations

**Waste Disposal Methods** 

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

	14. Transport information
DOT	Not regulated
TDG	Not regulated
DOT TDG IATA	Not regulated
IMDG/IMO_	Not regulated

# 15. Regulatory information

All of the components in the product are on the following Inventory lists:

#### **International Inventories**

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Lead	Х	Χ	-	231-100-4	-		Χ	Χ	Χ	Х	Χ
Antimony	Х	Х	-	231-146-5	-		Х	-	Х	Х	Х
Arsenic	Х	Χ	-	231-148-6	-		Χ	-	Х	Х	Χ

#### Legend:

- X Listed
- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

# U.S. Federal Regulations

TSCA 12(b) Not applicable

# **SARA 313**

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Lead	7439-92-1	90 - 98.9	0.1
Antimony	7440-36-0	1 - 8	1.0
Arsenic	7440-38-2	0.1 - 2	0.1

## SARA 311/312 Hazardous Categorization

Acute Health HazardYesChronic Health HazardYesFire HazardNoSudden Release of Pressure HazardNoReactive HazardNo

## **Clean Water Act**

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Lead	-	-	X	X
Antimony	-	-	X	X
Arsenic	=	=	Х	Х

#### Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Lead	X		-
Antimony	X		-
Arsenic	X		-

# **OSHA** Occupational Safety and Health Administration Not applicable

Component	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Lead	30 μg/m³ Action Level 50 μg/m³ TWA	-
Arsenic	10 μg/m³ TWA 5 μg/m³ Action Level	-

## CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Lead	10 lb	-
Antimony	5000 lb 10 lb	-
Arsenic	1 lb	-

## **California Proposition 65**

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Lead	7439-92-1	Carcinogen Developmental Female Reproductive Male Reproductive	15 μg/day	Developmental Carcinogen
Arsenic	7440-38-2	Carcinogen	0.06 μg/day 10 μg/day	Carcinogen

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Lead	X	X	X	Х	X
Antimony	X	X	Х	X	X
Arsenic	X	X	X	X	Х

# **U.S. Department of Transportation**

Reportable Quantity (RQ): Y
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

## **U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

## Other International Regulations

Mexico - Grade No information available

#### Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class

D2A Very toxic materials

D1B Toxic materials



## 16. Other information

Prepared By Regulatory Affairs

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Revision Summary

This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS)

#### **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 SDS**