Safety Data Sheet: LECTRO-PLUS SOLDER

Supercedes Date 10/27/2011 **Issuing Date** 06/16/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name LECTRO-PLUS SOLDER
Recommended use Soldering
Information on Manufacturer
X-ERGON by Partsmaster, Div of NCH Corp.

P.O. Box 655326
Dallas, TX 75265-5326

Product Code 28480000
Chemical nature Inorganic solid blend
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
800-336-0450

2. HAZARD IDENTIFICATION

Color gray **Physical State** Solid **Odor** No information available

GHS Classification

Physical Hazards
None

Health Hazard

Acute Oral Toxicity	Category 4
Acute Inhalation Toxicity - Gas	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 4
Skin Corrosion/Irritation	Category 3
Skin Sensitization	Category 1
Reproductive Toxicity	Category 1A
Specific target organ systemic toxicity (repeated exposure)	Category 2

Other hazards
None

Labeling
Signal Word
DANGER

Hazard Statements
H332 - Harmful if inhaled
H302 - Harmful if swallowed
H316 - Causes mild skin irritation
H317 - May cause an allergic skin reaction
H360 - May damage fertility or the unborn child
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary Statements
P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P260 - Do not breathe dust or fume.
P271 - Use in a well-ventilated area.
P285 - In case of inadequate ventilation wear respiratory protection
P270 - Do not eat, drink or smoke when using this product
P281 - Use personal protective equipment as required
P280 - Wear protective gloves, protective clothing and eye protection.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P272 - Contaminated work clothing should not be allowed out of the workplace
P312 - Call a physician if unwell.
P321 - Specific treatment (see supplemental first aid instructions on this label)
P302+ P352 - IF ON SKIN: Wash with plenty of soap and water
P333 + P313 - If skin irritation or rash occurs, get medical attention
P363 - Wash contaminated clothing before reuse
P301+ P312 - IF SWALLOWED: Call a physician if unwell
P330 - Rinse mouth
P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P342 + P311 - If experiencing respiratory symptoms, call a physician
P405 - Store locked up
P501 - Dispose of contents and container to an approved waste disposal plant.

0.5 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Tin	7440-31-5	30-60
Lead	7439-92-1	40-70
Rosin	8050-09-7	1-3
Antimony	7440-36-0	.1-1
Copper	7440-50-8	.1-1

4. FIRST AID MEASURES

General advice Show this safety data sheet to the doctor in attendance. If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray . Do not get in eyes, on skin or on clothing.

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

Skin Contact Wash off immediately with soap and plenty of water. Wash contaminated clothing before re-use. Get medical attention if symptoms occur.

Inhalation Remove person to fresh air. If signs/symptoms continue, get medical attention.

Ingestion If swallowed, do not induce vomiting - seek medical advice. Rinse mouth.

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point The product is not flammable **Method** Not applicable

Upper No data available **Lower** No data available

Suitable Extinguishing Media

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

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes . .

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 **Health** 2 **Flammability** 0 **Instability** 0

HMIS **Health** 2 **Flammability** 0 **Instability** 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Avoid contact with skin, eyes, and clothing.

Environmental Precautions Prevent product from contaminating soil or from entering sewage, drainage systems, and bodies of water . Do not flush into surface water or sanitary sewer system.

Methods for Containment No information available

Methods for Cleaning Up Shovel into suitable container for disposal. Sweep up or vacuum up spillage and collect in suitable container for disposal. Take up mechanically and collect in suitable container for disposal. Avoid dust formation. Clean contaminated surface thoroughly. Soak up with inert absorbent material.

Neutralizing Agent Not applicable.

7. HANDLING AND STORAGE

Handling Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wear personal protective equipment. Do not breathe vapors/dust.

Storage Keep containers tightly closed in a cool, well-ventilated place. Keep out of the reach of children.

Storage Temperature **Minimum** °F / °C **Maximum** 120 °F / 49 °C

Storage Conditions **Indoor** X **Outdoor** **Heated** **Refrigerated**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Tin	TWA: 2 mg/m^3	TWA: 2 mg/m^3	100 mg/m^3 TWA: 2 mg/m^3
Lead	: 0.05 mg/m^3 TWA : 0.05 mg/m^3 TWA (as Pb)	: 50 µg/m^3 TWA : 50 µg/m^3 TWA (as Pb)	100 mg/m^3 TWA: 0.050 mg/m^3
Rosin	No data available	No data available	TWA: 0.1 mg/m^3
Antimony	TWA: 0.5 mg/m^3	TWA: 0.5 mg/m^3	50 mg/m^3 TWA: 0.5 mg/m^3

Copper	TWA: 0.2 mg/m^3	TWA: 0.1 mg/m^3 TWA: 1 mg/m^3	100 mg/m^3 dust, fume and mist TWA: 1 mg/m^3 TWA: 0.1 mg/m^3

Engineering Measures Use enough ventilation, local exhaust at the arc, or both to keep the fumes and gases below the TLV's in the worker's breathing zone and in the general area. Train the worker to keep his head out of the fumes .

Personal Protective Equipment

Eye/Face Protection Safety glasses with side-shields. Wear a helmet or use face shield with filter lens of appropriate shade number (SEE ANSI/ASCZ49.1) provide protective screen and flash goggles, if necessary, to shield others. As a rule of thumb, start a shade that is too dark to see the weld zone. Then go next lighter shade which gives sufficient view of the weld zone .

Skin Protection Protective gloves

Respiratory Protection Use enough ventilation, local exhaust at the arc, or both to keep the fumes and gasses below the TLV's in the workers' breathing zone and the general area. Train the worker to keep his head out of the fumes. Use MSHA/NIOSH approved or equivalent fume respirator or air supplied respirator when welding in a confined space or when local exhaust or ventilation does not keep exposure below TLV.

General Hygiene Considerations Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid	**Viscosity**	Not applicable
Color	gray	**Odor**	No information available
Odor Threshold	Not applicable	**Appearance**	Textured black paste
pH	Not applicable	**Specific Gravity**	11.3
Evaporation Rate	Not applicable	**Percent Volatile (Volume)**	No information available
VOC Content (%)	No information available	**Vapor Pressure**	Not applicable
Vapor Density	Not applicable	**Solubility**	Insoluble
n-Octanol/Water Partition	No data available	**Melting Point/Range**	364 - 593 °F / 184 - 312 °C
Decomposition Temperature	No data available	**Boiling Point/Range**	223/2372 / 106-1300 °C
Flammability (solid, gas)	No data available		
Flash Point	The product is not flammable	**Method**	Not applicable
Autoignition Temperature	No information available.		

Upper No data available **Lower** No data available

10. STABILITY AND REACTIVITY

Chemical Stability Stable under normal conditions

Conditions to Avoid None known

Incompatible Products No materials to be especially mentioned

Hazardous Decomposition Products Fumes and gasses produced by welding, brazing and similar processes cannot be classified simply. The composition and quantity of both are dependent upon the metal being welded, the process, the procedures and the filler metal being used. Other conditions which also influence the composition and quantity of fumes and gases to which the worker may be exposed include: coatings on the metal being welded, the number of welders and the volume of the work space, the quality and amount of ventilation used, the position of the welder's head in relation to the fume plume, as well as the presence of contaminants in the atmosphere when the filler metal is consumed. The fume and gas decomposition products generated are different in percent and form the product ingredients listed in Section III. The products formed in normal operation include those originating from the volatilization, reaction and oxidation of the filler metal, the metal being welded, the coatings, etc. as noted above. One recommended way to determine the composition and quality of fumes and gases to which workers are exposed is to take an air sample inside the welders helmet if worn or in the workers breathing zone. See ANSI/AWS F1.1 "Method For Sampling Airborne Particles Generated By Welding And Allied Processes" available from the American Welding Society, P.O. Box 35140, Miami, FL 33135

Possibility of Hazardous Reactions Strong oxidizing agents

11. TOXICOLOGICAL INFORMATION

Product Information

The following values are calculated based on chapter 3.1 of the GHS document (Rev. 3, 2009):

Oral LD50 No information available
Dermal LD50 No information available
Inhalation LC50
Gas No information available
Mist No information available
Vapor No information available

Principle Route of Exposure Inhalation, Skin contact.
Primary Routes of Entry Inhalation, Ingestion.
Acute Effects
Eyes Risk of serious damage to eyes. Welding arc may damage eyes .
Skin May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
Inhalation Harmful by inhalation. Causes headache, drowsiness or other effects to the central nervous system. May cause allergic respiratory reaction. Welding fumes may result in discomfort such as: dizziness, nausea, or dryness or irritation of nose, throat, or eyes. Fumes can aggravate asthma, bronchial conditions, or allergies. Individuals with allergies or impaired respiratory function may have symptoms worsen by exposure to welding fumes .
Ingestion Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic Toxicity Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure. Lead may damage kidney function, the blood forming system and the reproductive system. Fume may cause Wilson's disease in some individuals with a rare inherited metabolic disorder characterized by retention of copper in the liver, brain, kidney and corneas. Wilson's disease, if untreated can result in liver failure .
Target Organ Effects Blood, Central nervous system, Gastrointestinal tract, Gingival Tissue, Kidney, Respiratory system.
Aggravated Medical Conditions Allergies, Skin disorders, Respiratory system, Central nervous system, Gastrointestinal tract, Kidney disorders.

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Tin	= 700 mg/kg (Rat)	no data available	no data available	no data available	no data available
Lead	no data available	no data available	no data available	no data available	no data available
Rosin	no data available	> 2500 mg/kg (Rabbit)	no data available	no data available	no data available
Antimony	= 7 g/kg (Rat)	no data available	no data available	no data available	no data available
Copper	no data available	no data available	no data available	no data available	no data available

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Tin	no data available	no data available	no data available	no data available	eyes,respiratory system,skin
Lead	no data available	no data available	no data available	no data available	GI tract, CNS, kidneys, blood, gingival tissue, eyes
Rosin	no data available	no data available	no data available	no data available	eyes,respiratory system
Antimony	no data available	no data available	no data available	no data available	respiratory system, CVS, skin, eyes
Copper	no data available	no data available	no data available	no data available	eyes,kidneys,liver,respira system,skin

Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Other
Tin	not applicable	not applicable	not applicable	not applicable	not applicable
Lead	A3	Group 2A	Reasonably Anticipated	X	not applicable
Rosin	not applicable	not applicable	not applicable	not applicable	not applicable
Antimony	not applicable	not applicable	not applicable	not applicable	not applicable
Copper	not applicable	not applicable	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Tin	no data available	no data available	no data available	no data available	N/A
Lead	no data available	LC50 = 0.44 mg/L Cyprinus carpio 96 h LC50 = 1.17 mg/L Oncorhynchus mykiss 96 h LC50 = 1.32 mg/L Oncorhynchus mykiss 96 h	no data available	EC50 600 µg/L water flea 48 h	N/A
Rosin	EC50 = 400 mg/L	no data available	EC50 = 31.5 mg/L 30 min	EC50 3.8 - 5.4 mg/L	N/A

	Desmodesmus subspicatus 72 h			Daphnia magna 48 h	
Antimony	no data available	no data available	no data available	no data available	N/A
Copper	EC50 0.031 - 0.054 mg/L Pseudokirchneriella subcapitata 96 h EC50 0.0426 - 0.0535 mg/L Pseudokirchneriella subcapitata 72 h	LC50 0.0068 - 0.0156 mg/L Pimephales promelas 96 h LC50 < 0.3 mg/L Pimephales promelas 96 h LC50 = 0.052 mg/L Oncorhynchus mykiss 96 h LC50 = 0.112 mg/L Poecilia reticulata 96 h LC50 = 0.2 mg/L Pimephales promelas 96 h LC50 = 0.3 mg/L Cyprinus carpio 96 h LC50 = 0.8 mg/L Cyprinus carpio 96 h LC50 = 1.25 mg/L Lepomis macrochirus 96 h	no data available	EC50 0.03 mg/L Daphnia magna 48 h	N/A

Persistence and Degradability No information available.
Bioaccumulation No information available.
Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of in accordance with local regulations.
Container Disposal Empty containers should be taken for local recycling, recovery, or waste disposal

14. TRANSPORT INFORMATION

DOT

TDG

Marine Pollutant This product contains a chemical which is listed as a marine pollutant according to TDG.

ICAO

IATA

IMDG/IMO

Marine Pollutant This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO

15. REGULATORY INFORMATION

Inventories
TSCA Complies
DSL Complies
U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Lead	7439-92-1	40-70	0.1
Antimony	7440-36-0	.1-1	1.0
Copper	7440-50-8	.1-1	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	Yes	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Tin	Not applicable	Not applicable
Lead	10 lb	Not applicable
Rosin	Not applicable	Not applicable
Antimony	5000 lb	Not applicable

Copper	5000 lb	Not applicable

U.S. State Regulations

California Proposition 65 This product contains the following Proposition 65 chemicals

Component	CAS-No	California Prop. 65
Lead	7439-92-1	carcinogen developmental toxicity male reproductive toxicity female reproductive toxicity

16. OTHER INFORMATION

Prepared By Christopher Drogin
Supercedes Date 10/27/2011
Issuing Date 06/16/2014
Reason for Revision No information available.
Glossary No information available.
List of References. No information available.

X-ERGON by Partsmaster, Div of NCH Corp.assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such unrecommended use, storage or disposal of the product. The information provided on this document 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.