

SAFETY DATA SHEET

1. MATERIAL IDENTIFICATION

Manufacturer's Name: Metallurgical Products Company
Address: 810 Lincoln Avenue
P.O. Box 598
West Chester, PA 19381-0598

Emergency Information: 610-696-6770 extension 120 (24 hr. customer service hotline)

Product Name: 15% Phosphor Copper

Product Description: Metal melting additive

2. HAZARD IDENTIFICATION

GHS LABEL ELEMENTS:



Signal Word: WARNING
Hazard Statement(s): RESPIRATORY SENSITIZER

3. COMPOSITION & INFORMATION ON INGREDIENTS

Element	CAS Number	EC Number	Chemical Symbol	Percentage	ACGIH 8 – hr. TWA
Copper	7440-50-8	231-159-6	Cu	84% - 86%	1.0 mg/m ³ -Dust 0.2 mg/ m ³ - Fume
Phosphorus	7723-14-0	231-768-7	P	14% - 15%	0.1 mg/ m ³

Effects of Overexposure:

*Phosphorus

Yellow phosphorus is toxic and may produce poisoning if taken by mouth. Chronic poisoning takes the form of general weakness, including anemia, loss of appetite, garlic-like odor of the breath, loosening of the teeth, severe pain, and swelling of the jaw.

*Copper

Melting, grinding, cutting of copper may produce fumes or dust exposure and breathing these fumes or dust may present potentially significant health hazards. Fumes of copper may cause metal fume fever with flu-like symptoms and skin and hair discoloration. While industrial dermatitis has not been reported, keratinization of the hands and the soles of the feet have been reported. Systemically as well, copper dust and fume cause irritation of the upper respiratory tract, metallic taste in the mouth, and nausea. Chronic poisoning may result in Wilson's disease, characterized by a hepatic cirrhosis, brain damage, demyelination, renal disease and copper deposition in the cornea.

SDS – 15 % P Cu

Revision Date: June 1, 2015

Revision No.: 3

4. FIRST AID MEASURES

Eye Contact:	Flush with copious amounts of water and seek medical attention if irritation persists.
Skin Contact:	Wash thoroughly with soap and water. Seek medical attention if irritation persists.
Inhalation:	Remove to fresh air. Get medical attention.
Ingestion:	Seek medical attention if large quantities of material have been ingested.

5. FIRE FIGHTING MEASURES

As shipped, the product is not combustible under normal conditions. Use firefighting methods that are appropriate for surrounding fire. Do not use water on fire where molten metal is present. Use class D extinguishing agents or dry sand on fines. Dust clouds may be explosive. Prevent formation of a dust cloud. Firefighters should wear self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

No special precautions are necessary for spills of bulk material. If large quantities of dust are spilled, remove by vacuuming or wet sweeping to prevent heavy concentrations of airborne dust. Follow national and local regulations concerning the disposal of waste.

7. HANDLING AND STORAGE

Handling	Avoid breathing dusts, wash hands immediately after handling product, and ensure clean water eye wash is readily available.
Storage	Store in original containers in a cool and dry environment.

8. EXPOSURE CONTROLS

Respiratory Protection:	If exposure above the PEL or TLV, NIOSH approved respirator for fume or dust, dependent upon the source of airborne contaminant.
Protective gloves:	Required for melting, grinding, cutting, and welding operations. Select glove approved for the specific operation.
Eye Protection:	Required for melting, grinding, cutting and welding operations. Minimum requirement of safety glasses with side shields for these operations. Melting and welding may require special eye protection including face shields and specially tinted glass. Grinding operations may also require face-shield.
Skin & Body Protection	As required for the work associated with the melting and pouring of molten metal.
Work/Hygiene Practices:	As required for the work associated with the melting and pouring of molten metal.
Other	Use precautions in lifting and prevent dropping of material.
Ventilation:	Required if dust or fume is created in handling or working on this material.
Local Exhaust:	Required if dust or fume is created in handling or working on this material.
Mechanical (general):	As above to reduce airborne dust or fume levels.

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Revision No.: 3

9. PHYSICAL AND CHEMICAL PROPERTIES

Melting Point:	1885° F / 1029° C	Specific Gravity:	8.9 +/- 1.5
Vapor Pressure:	Not Applicable	Vapor Density:	Not Applicable
% Volatile by Volume:	Not Applicable	Evaporation Rate:	Not Applicable
Appearance and odor:	Silver colored metallic solid in shot (pellet) form or waffle (ingot) form with no odor.		

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of use, storage, and transportation.
Conditions to Avoid:	Wet materials will react with molten metal. Avoid contact of finely divided material with heat, oxidizers, acids, alkaline, and halogenated compounds (as above).
Hazardous Decomposition of Byproducts:	At temperatures above the melting point metal fumes or vapors may be emitted.

11. TOXICOLOGY INFORMATION

Inhalation	Inhalation of dust may cause nausea. Inhalation of fume may cause metal fume fever.
Skin Contact	May cause skin irritation in susceptible persons.
Eye Contact	May cause eye irritation in susceptible persons.
Ingestion	Unlikely route of exposure and not expected under normal use.

12. ECOLOGICAL INFORMATION

Biodegradability	Not biodegradable
Bio Accumulation	This product has the potential to bio accumulate.
Mobility	No Data Available
Water Solubility	Not Water Soluble

13. DISPOSAL CONSIDERATIONS

Waste:	Dispose of in accordance with national and local regulations.
Packaging:	Dispose of in accordance with national and local regulations. Do not remove labeling until containers have been cleaned.
Hazardous residue:	May contain hazardous residues. Dispose of in accordance with national and local regulations. Do not remove labeling until containers have been cleaned.

14. TRANSPORTATION INFORMATION

Not Regulated under UN, DOT, ADR, ADN, IMDG and IATA

15. REGULATORY INFORMATION
European directive according to the classification of hazardous preparations 90/492/EEC.
US federal regulations – none of the ingredients are listed
US OSHA specifically regulated substances – none present in regulated quantities
SARA- Section 302 and 355 (extremely hazardous substances) Phosphorus CAS#7723-14-0
SARA- Section 304 (emergency release) Phosphorus CAS#7723-14-0
SARA- Section 311/312 (threshold planning quantity) None of the ingredients are listed
SARA- Section 313 (TRI Reporting) Copper CAS#7440-50-8
CERCLA- Hazardous Substance List (40 CFR 302.4) Copper CAS#7440-50-8, Phosphorus CAS# 7723-14-0
TSCA – all ingredients are listed
Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3) – none present in regulated quantities.
Clean Air Act Section 112(r) Accidental Release Prevention (40 CFR 68.130) – none present in regulated quantities.
Proposition 65(California) - None of the ingredients are listed.
State Right to Know Listings (United States) New Jersey Worker and Community right to Know Act – Copper and Phosphorus
State Right to Know Listings (United States) Massachusetts RTK Substance List – Copper and Phosphorus
State Right to Know Listings (United States) Pennsylvania Hazardous Substances – Copper and Phosphorus
State Right to Know Listings (United States) Rhode Island RTK – Copper and Phosphorus
Canada - Canadian Controlled products Regulations: Not hazardous under WHMIS
Canada - Canadian Domestic Substances List (DSL) – All of the ingredients are listed
Canada - Canadian Non Domestic Substances List (NDSL) – None of the ingredients are listed.
Canada - Canadian Ingredient Disclosure List (limit 1%) – All of the ingredients are listed.
Canada - Canadian Ingredient Disclosure List (limit 0.1%) – None of the ingredients are listed.
Chemical safety assessment: A chemical safety assessment has not been carried out.

16. OTHER INFORMATION

This Safety Data Sheet conforms to EC Directive 91/155/EC, as amended by 93/112/EC.
This issue of MSDS/Rev2 of effective date January 7, 2011, includes revision to section 8 Safety Codes added and Section 11 Risk codes added.
This issue of MSDS/Rev3 of effective date June 1, 2015, includes revisions to acc. To OSHA GHS (29 CFR 1910.1200)
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