

SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: NP Starting powder
Product Description: Black / silver granular
Intended Use: Welding metal

COMPANY IDENTIFICATION

Supplier: BURNDY LLC
 47 East Industrial Park Drive
 Manchester, NH 03109 USA

24 Hour Emergency (INFOTRAC) (800) 535-5053 (US and Canada)
 (352) 323-3500 (International)
Burndy Informational Number (603) 647-5000

SECTION 2 HAZARDS IDENTIFICATION

CLASSIFICATION

Health	Environmental	Physical
<ul style="list-style-type: none"> Acute Toxicity - Oral, Category 4 Skin Irritation - Category 3 Eye Irritation - Category 2B 	No Classifiable hazards	Flammable Solids - Category 1

LABELLING

Symbols:



Health Hazard



Flame



Irritant

Signal Word: Warning

Hazard Statements

- H 302: Harmful if swallowed
- H 320: Causes eye irritation
- H 228: Flammable Solid
- H315: Causes skin irritation

Precautionary Statements

- P 273: Avoid release to the environment
- P 261: Avoid breathing dust/fume/gas/mist/vapors/spray
- P 264: Wash thoroughly after handling
- P 280: Wear protective gloves/clothing

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Reportable Hazardous Substance(s) or Complex Substance(s):

Name	Common Name/ Synonym	CAS #	Percentage	Impurities	Risk Phrases
Cupric oxide	-	1317-38-0	15-40	None Known	Refer Section 15
Aluminium (fume or dust)	-	7429-90-5	30-60	None Known	
Iron oxide, black	-	1317-61-9	15-40	None Known	

* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume. The exposure limits of this product, when allowed to enter the environment as dust particulate, are covered under the rules of 29 CFR 1910.1000, Table Z -3, "All inert or nuisance dusts, whether mineral, inorganic or organic."

SECTION 4 FIRST AID MEASURES

ROUTES OF ENTRY: Ingestion, Contact

EMERGENCY AND FIRST AID PROCEDURES:

- Inhalation:** Remove affected person to fresh air, if symptoms persist seek medical attention.
- Eye Contact:** Remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists, seek medical attention.
- Skin Contact:** Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists, seek medical attention.
- Ingestion:** Give two glasses of water for dilution; induce vomiting as directed by medical personnel; never give anything by mouth to an unconscious person; seek medical attention.

SECTION 5 FIRE FIGHTING MEASURES

GENERAL HAZARDS

Products of combustion include metal oxides and metal dust.

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use carbon dioxide, water, water fog, dry chemical, chemical foam, dry sand.

Inappropriate Extinguishing Media: None known

FIRE FIGHTING PROCEDURES

Fire Fighting Instructions: Firefighters must wear full face piece self - contained breathing apparatus in positive pressure mode.

Unusual Fire Hazards / Combustion Products: BURNDY Weld copper base welding/joining materials are exothermic mixtures, which when reacted, produce hot molten materials with temperatures in excess of 4000° F and a localized release of smoke. The materials are not explosive, ignition temperatures are in excess of 850° F for starting material and 1750° F for base material. They are not shock sensitive, nor are they subject to spontaneous ignition. Should the material be accidentally ignited, the immediate and direct application of large volumes of water will effectively retard the spread of fire and control it. Large amounts of dense, dusty smoke will be liberated during an accidental fire.

Smoke, oxides of carbon; fumes of copper and aluminum.

SECTION 6 ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Confine and segregate product for reuse; place material into approved containers for disposal; refer to SARA Title III, Section 313, 40 CFR 372 for reporting requirements. Do not discharge into lakes, ponds, streams or public waters.

SECTION 7 HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Storage of BURNDY Weld Exothermic materials should be in a clean dry area and restricted to access by authorized personnel only. Do not subject to rough handling or physical damage, nor excessive vibration. Store in accordance with "This Side Up" labels. Protect from weather and moisture. DO NOT USE PRODUCTS THAT HAVE BEEN EXPOSED TO MOISTURE. Before using BURNDY Weld Exothermic

Process, personnel should be trained by a BURNDY Weld representative. Read and understand the instruction sheet packaged with the mold, and observe all general and safety instructions

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES:

Component name	CAS NUMBER	TWA/STEL	NIOSH	ACGIH	Note
Cupric oxide	1317-38-0	TWA	1 mg/m ³	-	-
Aluminium (fume or dust)	7429-90-5	TWA	10 mg/m ³	10 mg/m ³	-
Iron oxide, black	1317-61-9	TWA	10 mg/m ³	15 mg/m ³	-

PERSONAL PROTECTIVE EQUIPMENT:

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection: NIOSH approved respirator designed to remove airborne particulate present in excess of maximum allowable concentrations due to secondary operations such as mixing, spraying, sanding, buffing, etc. Refer to 29 CFR 1910.134 or European Standard EN 149 for regulations.

Hand Protection: Neoprene or rubber gloves may be used when handling product.

Eye protection: Protective eyeglasses or chemical safety goggles. Refer to 29 CFR 1910.133 or European Standard EN166.

Other Protective Clothing or Equipment: Safety eyebath nearby

Work or Hygienic Practices: Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

SECTION 9 PHYSICAL/CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. Consult the Manufacturer in Section 1 for additional data.

GENERAL INFORMATION:

Physical State:	Solid
Color:	Black/ Silver
Odor:	Characteristic odor
Odor Threshold:	Not Available

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION:

Appearance:	Black/ Silver granules
pH:	Not Applicable
Viscosity:	Not Applicable
Freezing Point:	Not Available
Boiling Point:	Not Applicable
Flash Point:	Not Applicable
Evaporation Rate(Water=1):	Not Applicable
Lower Flammability Limit:	Not Applicable
Upper Flammability Limit:	Not Applicable
Vapor Pressure:	Not Applicable
Vapor Density (Air=1):	Not Applicable
Specific Gravity (Water = 1):	Approximately 5.0
Solubility in Water:	Insoluble
Coefficient of Water/Oil Distribution:	Not Available

Product Name: NP Starting powder
Revision Date: 25 October 2022 (rev B)
Page 4 of 6
Document 50131946

Auto-ignition Temperature: > 1750 °F (> 955 °C)
Percent Volatile, wt. %: Not Available
VOC content, wt. %: Not Available

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.
CONDITIONS TO AVOID: Avoid generating airborne dust, avoid moisture
INCOMPATIBLE MATERIALS: Strong oxidizers, strong acids.
HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition will not occur if handled and stored properly. In case of fire, smoke, oxides of carbon; fumes of copper and aluminum may be produced.
POSSIBILITY OF HAZARDOUS REACTIONS: HAZARDOUS POLYMERIZATION will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY VALUES

Ingredient	LD50/LC50 Route and Species
Cupric oxide (a)	LD ₅₀ : Not established
	LC ₅₀ : Not established
Aluminium (fume or dust) (a)	LD ₅₀ : Not established
	LC ₅₀ : Not established
Iron oxide, black (c)	LD ₅₀ : Not established
	LC ₅₀ : Not established

ACUTE EFFECTS

Eye Contact: Contact with eyes may cause irritation.
Skin Contact: None expected, however, prolonged contact may cause irritation.
Inhalation: Breathing airborne particles or dust from mixing, spraying, sanding, grinding, etc. may cause irritation to respiratory tract. Contains substances which are considered nuisance dusts which require a NIOSH approved respirator when airborne particulate exceeds maximum allowable limit.
Ingestion: May cause gastric distress, stomach pains, vomiting and diarrhoea

Carcinogenicity: IARC: NO ACGIH: NO NTP: NO OSHA Regulated: NO

SECTION 12 ECOLOGICAL INFORMATION

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture is classified as a Marine Pollutant.

SECTION 13 DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: According to the European Waste Catalogue, waste codes are application specific and should be assigned by the user based on the application for which the product is used. Dispose of in accordance with Local, State, and Federal Regulations. Do not flush to sanitary sewer or waterway. Refer to "40 CFR Protection of Environment Parts 260 - 299" for complete waste disposal regulations. Consult your local, state, or Federal Environmental Protection Agency before disposing of any chemicals.

Product Name: NP Starting powder
 Revision Date: 25 October 2022 (rev B)
 Page 5 of 6
 Document 50131946

SECTION 14 TRANSPORTATION

Regulatory Information	UN Number	Proper Shipping Name	Hazard Class	Packing Group	Label(s)	RQ	Additional Information
US DOT	Not Regulated by DOT						
TDG	Not Regulated for Land Transport						
ADR	Not Regulated for Land Transport						
IATA	Not Regulated for Air Transport						
IMDG	Not Regulated for Sea Transport						

SECTION 15 REGULATORY INFORMATION

TSCA (USA - Toxic Substance Control Act)

All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

SARA TITLE III (USA - Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories
 Immediate health

313 Reportable Ingredients:

(a) Indicates a toxic chemical subject to annual reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372

CERCLA (USA - Comprehensive Response Compensation and Liability Act)

None

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

There are no chemicals present known to the state of California to cause cancer or reproductive toxicity.

CPR (Canadian Controlled Products Regulations)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.
 WHMIS Classification: Not controlled

IDL (Canadian Ingredient Disclosure List)

Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 3.

DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List)

Components of this product identified by CAS number are listed on the DSL or NDSL and may or may not be listed in Section 2 of this document. Only ingredients classified as "hazardous" are listed in Section 3 unless otherwise indicated.

EUROPEAN INVENTORY OF EXISTING CHEMICALS (EINECS):

Chemical Name	CAS Number	EINECS Number	R-Phrase
Cupric oxide	1317-38-0	Not Assigned	R-Not Classified
Aluminum (fume or dust)	7429-90-5	231-072-3	R-15,R-17
Iron oxide, black	1317-61-9	Not Assigned	R-20/21/22,R-36/37/38

WGK Water Quality Rating: 1

EU RISK (R) AND SAFETY (S) PHRASES:

- R 15: Contact with water liberates extremely flammable gases
- R 17: Spontaneously flammable in air

Product Name: NP Starting powder
Revision Date: 25 October 2022 (rev B)
Page 6 of 6
Document 50131946

R20/21/22 : Harmful by inhalation, in contact with skin and if swallowed
R 36/37/38: Irritating to the eyes, respiratory system and skin
S 22: Do not breathe the dust.
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

SECTION 16	OTHER INFORMATION
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HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS) RATINGS:

Health - 1 Flammability - 0 Physical Hazard - 0 PPE – E

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Revision Date	Description	Sections Affected
2/13/08	Rev 1	
6/2/11	Rev 2	Sec 11, Transport
10/15/15	Rev A	All
10/25/22	Rev B	All

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