MARTRON INC.
SAFETY DATA SHEET
MARTRON BLK3ZN-2

Section 1: Identification

Product Name: **MARTRON BLK3ZN-2**
Product Number: **MFC-001508**

Product Use: N/A
Not Recommended For: N/A

Supplier Name: **Martron Inc.**
1394-A Walkup Ave.
Monroe, NC 28110
704-289-1934

Website: www.martroninc.com

Emergency Number: **CHEMTREC 800-424-9300**

Section 2: Hazard(s) Identification

GHS Ratings:

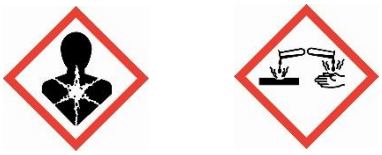
Corrosive to metals	1	Corrosive to metals
Skin corrosive	1A	Destruction of dermal tissue: Exposure < 3 min. Observation < 1-hour, visible necrosis in at least one animal
Eye corrosive	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5
Respiratory sensitizer	1	Respiratory sensitizer
Skin sensitizer	1	Skin sensitizer
Mutagen	2	Suspected/Possible: May include heritable mutations in human germ cells. Positive evidence from tests in mammals and somatic cell tests. In vivo somatic genotoxicity supported by in vitro mutagenicity
Carcinogen	1B	Presumed Human Carcinogen, based on demonstrated animal carcinogenicity
Reproductive toxin	1B	Presumed, Based on experimental animals

GHS Hazards:
H290: May be corrosive to metals.
H314: Causes severe skins burns and eye damage.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341: Suspected of causing genetic defects.
H350: May cause cancer.
H360: May damage fertility or the unborn child.

GHS Precautions:
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P234: Keep only in original container.
P260: Do not breathe dust/fume/gas/mist/vapors/spray.
P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
P264: Wash face, hands, and any exposed skin thoroughly after handling.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P281: Use personal protective equipment as required.

P281: In case of inadequate ventilation wear respiratory protection.
P310: Immediately call a POISON CENTER or doctor/physician.
P321: Specific treatment (see first aid treatment on SDS).
P363: Wash contaminated clothing before reuse.
P390: Absorb spillage to prevent material damage.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352: IF ON SKIN: Wash with soap and water.
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P304+P341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P333+P313: If skin irritation or a rash occurs: Get medical advice/attention.
P342+P311: If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.
P405: Store locked up.
P406: Store in a corrosive resistant container with a resistant inner liner.
P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Signal Word:
DANGER



Section 3: Composition / Information on Ingredients

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Nickel Acetate Tetrahydrate 6018-89-9 10 to 20%			
Cobalt (II) Nitrate 10141-05-6 10 to 20%			
Hydrogen Chloride 7647-01-0 5 to 10%		2 ppm Ceiling	NIOSH: 5 ppm Ceiling; 7 mg/m3 Ceiling
Phosphoric Acid 7664-38-2 5 to 10%	1 mg/m3 TWA	3 mg/m3 STEL 1 mg/m3 TWA	NIOSH: 1 mg/m3 TWA 3 mg/m3 STEL

Section 4: First Aid Measures

Inhalation:
Rescuers should put on appropriate protective gear. Remove from area of exposure. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep victim warm. Get immediate medical attention. To prevent aspiration, keep head below knees.

Eye Contact:
Immediately flush eyes with water. Flush eyes with water for a minimum of 15 minutes, occasionally lifting and lowering upper lids. Get medical attention promptly.

Skin Contact:
Remove contaminated clothing. Wash skin with soap and water. Get medical attention. Wash clothing separately and clean shoes before reuse.

Ingestion:
If swallowed, do NOT induce vomiting. Give victim a glass of water. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Section 5: Firefighting Measures

Flash Point: N/A LEL: UEL:

Extinguishing Media:
Water spray, carbon dioxide, and dry chemical are all suitable extinguishing media.

Specific Hazards Arising from the Chemical:
None Known

Special Protective Equipment and Precautions for Firefighters Special Information:
As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA / NIOSH approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures

Spill and Leak Procedures:
Use proper personal protective equipment. Neutralize with soda ash or lime. Pickup and place in a suitable container for proper disposal.

Section 7: Handling and Storage

Handling Procedures:
Use with adequate ventilation. Avoid breathing dusts, mists, and vapors. Do not get in eyes, on skin, or on clothing. Wear eye protection and protective clothing. Wash thoroughly after handling.

Storage Requirements:
Keep containers closed when not in use. Store in a cool, dry, well-ventilated area.

Section 8: Exposure Control / Personal Protection

Chemical Name / CAS #	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Nickel Acetate Tetrahydrate 6018-89-9			
Cobalt (II) Nitrate 10141-05-6			
Hydrogen Chloride 7647-01-0		2 ppm Ceiling	NIOSH: 5 ppm Ceiling; 7 mg/m3 Ceiling
Phosphoric Acid 7664-38-2	1 mg/m3 TWA	3 mg/m3 STEL 1 mg/m3 TWA	NIOSH: 1 mg/m3 TWA 3 mg/m3 STEL

Engineering Controls:
Provide ventilation sufficient to maintain exposure below the recommended limits.

Respiratory Protection:
A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant the use of a respirator.

Skin Protection:
Wear impervious protective gloves. Wear protective gear as needed - apron, suit, boots.

Eye Protection:
Wear safety glasses with side shields (or goggles) and a face shield.

Other Protective Equipment:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Hygienic Practices:
Do not eat, drink, or smoke in areas where this material is used. Avoid breathing vapors. Remove contaminated clothing and wash before reuse. Wash thoroughly after handling. Wash hands before eating.

Section 9: Physical and Chemical Properties

Appearance:	Pink liquid
Odor:	Unknown
Vapor Pressure:	Unknown
Odor Threshold:	Unknown
Vapor Density:	Unknown
pH:	< 2 (10% solution)
Density:	Unknown
Melting Point:	Unknown
Freezing Point:	Unknown
Solubility:	Soluble
Boiling Range:	Unknown
Flash Point:	Unknown
Evaporation Rate:	Unknown
Flammability:	Unknown
Explosive Limits:	Unknown
Specific Gravity:	1.1
Auto ignition Temperature:	Unknown
Decomposition Temperature:	Unknown
Viscosity:	Unknown
Grams VOC Less Water:	Unknown

Section 10: Stability and Reactivity

Chemical Stability:
STABLE

Incompatible Materials:
Sulfides and sulfites, strong bases, and many metals. Avoid strong alkali. Strong oxidizing agents.

Conditions to Avoid:
None known

Hazardous Decomposition Products:
Thermal decomposition: hydrochloric acid. Contact with metals may evolve flammable hydrogen gas. Carbon oxides.

Hazardous Polymerization:
Hazardous polymerization will not occur.

Section 11: Toxicology Information

Mixture Toxicity:
Oral Toxicity LD50: 2,806mg/kg
Inhalation Toxicity LC50: 22mg/L

Component Toxicity:
7664-38-2 Phosphoric acid
Oral LD50: 1,530 mg/kg (Rat)
Dermal LD50: 2,740 mg/kg (Rabbit)

Routes of Entry:
Inhalation
Ingestion
Skin contact
Eye contact

Target Organs:
Eyes
Skin
Respiratory System

Effects of Overexposure:
Emergency Overview:
Contact with this material will cause burns to the skin, eyes and mucous membranes. May be harmful if swallowed.

Health Effects:
This product causes burns to eyes and skin. Excessive inhalation of vapor or mist may cause nose, throat, and respiratory irritation. Ingestion may cause burns of the mouth, throat and stomach. Overexposure to cobalt compounds may cause respiratory sensitization and an allergic skin rash. Excessive inhalation and/or ingestion of cobalt salts may affect the kidneys, lungs and thyroid.

CAS Number	Description	% Weight	Carcinogen Rating
10141-05-6	Cobalt (II) nitrate	10 to 20%	Cobalt (II) nitrate: IARC: Possible human carcinogen OSHA: listed EU REACH: Present
6018-89-9	Nickel acetate tetrahydrate	10 to 20%	Nickel acetate tetrahydrate: IARC: Human carcinogen OSHA: listed

Section 12: Ecological Information

Component Ecotoxicity:

Section 13: Disposal Considerations

Dispose of in accordance with local, state and federal regulations.

Section 14: Transportation Information

UN1760, Corrosive Liquid, N.O.S., (Phosphoric Acid), 8, PGII

Section 15: Regulatory Information

CERCLA/SARA Hazardous Substances:
Phosphoric acid
Hydrogen chloride

DEA List I and II Chemicals:
7647-01-0 Hydrogen chloride

OSHA Process Safety Management Highly Hazardous Chemicals:
7647-01-0 Hydrogen chloride

U.S. Clean Air Act Toxic and Flammable Substances:
7647-01-0 Hydrogen chloride

Sara 313:
7647-01-0 Hydrogen Chloride

TSCA 8(b) Inventory:
7664-38-2 Phosphoric Acid
7647-01-0 Hydrogen Chloride
10141-05-6 Cobalt (II) Nitrate

Country	Regulation	All Components Listed

Section 16: Other Information

Date Prepared:
6/15/2015
Reviewer Revision

Disclaimer:
The information herein is believed to be correct but does not claim to be all inclusive and should be used only as a guide. Neither the above-named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Our Safety Data Sheet (SDS) is based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated Safety Data Sheet (SDS) for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.