

# SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier**  
**Product Name** Cruci-Coat  
**Product Code** 6048  
**Safety Data Sheet Supplier Information:** Consolidated Metal Products LLC  
 14747 Northsight Blvd., Ste 111-215  
 Scottsdale, AZ 85260  
**Manufacturer** www.consolidatedmetalproducts.com  
**Telephone (General)** (602) 899-2803  
**Emergency Telephone Number** 911

## 2. HAZARDS IDENTIFICATION

### GHS CLASSIFICATION:

#### SIGNAL WORD

Warning

#### SYMBOL(S)



**PRIMARY ROUTES OF EXPOSURE** Inhalation, contact to eyes and skin.

#### HAZARD STATEMENTS

Eye Irritation	Category 2B	H320	Causes eye irritation.
Inhalation	Category 4	H332	Harmful if inhaled.
STOT:SE	Category 3	H335	May cause respiratory irritation.

#### PRECAUTIONARY STATEMENT(S)

P261	Avoid breathing dust / fume / gas / mist / vapors / spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P304 + P340	IF INHALED: 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 contacts lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor / physician if you feel unwell.
P337 + P313	If eye irritation persists: Get medical advice / attention.
P403 + P233	Store in a well-ventilated place. Keep the container tightly closed.
P405	Store locked up.
P501	Dispose of contents / container in accordance with local / regional / national / international regulations.

Health 1  
 Fire 0  
 Reactivity 0



## SAFETY DATA SHEET

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Hazard Components		Wt.%
	Identifiers		
Boron Nitride	CAS No.	10043-11-5	20-25
Water	CAS No.	7732-18-5	65-70
Proprietary-Trade Secret	CAS No.	Mixture	<1
Proprietary-Trade Secret	CAS No.		3-6
Nitric acid	CAS No.	7697-37-2	1-3

### 4. FIRST AID MEASURES

<b>EYES</b>	Flush eyes, including under the eyelids, with large amounts of water. If irritation persists seek medical attention.
<b>SKIN</b>	Wash thoroughly with mild soap and water.
<b>INGESTION</b>	Give copious amounts of water and seek medical attention.
<b>INHALATION</b>	Remove to fresh air. Seek medical attention if symptoms persist.

### 5. FIRE FIGHTING MEASURES

<b>Extinguishing Media</b>	This water-based refractory coating is non-combustible.
<b>Flammability Classification</b>	Not classified. This water-based refractory coating is non-combustible.
<b>Special Hazards Arising from the Chemical</b>	Initial exposure to high temperatures may cause small quantities of Nitric oxide fumes to be evolved that may be irritating or corrosive to the upper respiratory system.
<b>Hazardous Combustion Products</b>	None known.
<b>Specific Protective Equipment and Precautions (Firefighters)</b>	As in any fire, wear self-contained breathing apparatus (SCBA), NIOSH (approved or equivalent) and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions, Protective Equipment and Emergency Procedures</b>	Clean up personnel should wear protective gloves and goggles to prevent possible irritation from prolonged contact. Contain the spill by using a mineral absorbent. It can be neutralized using any basic neutralization agent such as lime or sodium bicarbonate.
<b>Environmental Precautions</b>	No data available.
<b>Methods and Materials For Containment and Cleaning Up</b>	No special measures are required; refer to environmental and personal precautions, and other sections of this document.

### 7. HANDLING AND STORAGE

<b>SAFE HANDLING PRECAUTIONS</b>	Note the Exposure Controls and Personal Protection (Section 8) before using. Boron Nitride is slippery, and is considered a slip hazard if spilt on a walkway. Practice good housekeeping.
<b>SAFE STORAGE PRECAUTIONS</b>	Store in original container. Do not store in metal containers since the paint may be corrosive to the container.

## SAFETY DATA SHEET

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Exposure Limits/Guidelines

<b>Engineering Measures/Controls</b>	Provide adequate ventilation to control vapor/dust below the regulated exposure limits (PEL and TLV).
<b>Personal Protective Equipment</b>	Protective clothing should be selected specifically for the workplace, depending on the concentration and quality of the hazardous substances handled. The chemical resistance of the protective gear should be inquired from the respective supplier.
<b>Respiratory</b>	An appropriate NIOSH-approved respirator must be worn if exposure is likely to exceed the lowest TLV/PEL rated regulations.
<b>Eye/Face</b>	Safety goggles or side shielded safety glasses are recommended for any type of industrial handling.
<b>Hands</b>	Use impervious gloves.
<b>Skin/Body</b>	Normal work clothing. Note that long sleeved shirts, long pants and gloves are recommended.

#### Exposure Guidelines

<b>Boron Nitride</b>	Guideline ACGIH (TLV):	None established (treat as nuisance dust) 10 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable fraction)
	Guideline OSHA (PEL):	None established (treat as nuisance dust) 15 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable fraction)
	<b>Aluminum Oxide</b>	Guideline ACGIH (TLV): 10 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable fraction) Guideline OSHA (PEL): 15 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable fraction)
	<b>Proprietary Trade Secret</b>	Guideline ACGIH (TLV): 0.02 mg/m <sup>3</sup> Guideline OSHA (PEL): 0.1 mg/m <sup>3</sup>
<b>Nitric Acid</b>	Guideline ACGIH (TLV):	2 ppm (or 5.2 mg/m <sup>3</sup> )
	Guideline OSHA (PEL):	2 ppm (or 5 mg/m <sup>3</sup> )

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Liquid	<b>Odor</b>	Nearly odorless
<b>Color</b>	Blue	<b>Vapor Pressure</b>	Approximately 10 – 20 mmHg
<b>Specific Gravity</b>	1.2	<b>Vapor Density</b>	Greater than air (Air=1)
<b>pH</b>	2-4	<b>Solubility in Water</b>	Dilutable
<b>Viscosity</b>	900 – 1150 cps	<b>Freezing Point</b>	0° C (32° F)
<b>Melting Point</b>	n. ap.	<b>Boiling Point</b>	100° C (212° F)

## SAFETY DATA SHEET

### Coatings

VOC Content	0 g/L	Percent Volatile	65% - 70%
Molecular Weight	n. ap.	Flash Point	n. ap.
Evaporation Rate	Similar to water	Flash Point Method	n. ap.

### 10. STABILITY AND REACTIVITY

Chemical Stability	This refractory coating is stable under all normal conditions of storage. Hazardous polymerization will not occur.
Incompatible Materials	As a good practice, do not mix with any other materials.
Conditions To Avoid	None known.
Hazardous Decomposition Products	Upon initial heating to 600° C, nitrogen oxide fumes may evolve in very small amounts.

### 11. TOXICOLOGICAL INFORMATION

Route(s) Of Entry/Exposure	Note all values are calculated in accordance with OSHA 29 C.F.R. § 1910 for mixtures.
Ingestion	LD <sub>50</sub> Oral - rat: 2474 mg/kg
Skin Absorption	LD <sub>50</sub> Dermal – rat: 2051 mg/kg
Inhalation	LC <sub>50</sub> Inhalation – rat (per 4 hours): 16.9 mg/L
Eye Contact	Corrosive burns on prolonged contact.
Skin Contact	Possible mild inflammation.
Effects of Acute Exposure	See above section for eye contact, skin contact, ingestion, and inhalation information.
Effects of Chronic Exposure	CAUTION! Exposure to dust may be irritating to eyes, nose and throat.
Exposure Limits	
NTP	No ingredient of this product is present at levels greater than or equal to 0.1% is identified as a probable, possible, or confirmed carcinogen by NTP.
IARC	No ingredient of this product is present at levels greater than or equal to 0.1% is identified as a probable, possible, or confirmed carcinogen by IARC.
ACGIH	No ingredient of this product is present at levels greater than or equal to 0.1% is identified as a probable, possible, or confirmed carcinogen by ACGIH.
OSHA	No ingredient of this product is present at levels greater than or equal to 0.1% is identified as a probable, possible, or confirmed carcinogen by OSHA.
Reproductive Effects	No data available.
Further Information	Quantitative data on this product is not available. No toxic effects are to be expected when this product is handled appropriately.

### 12. ECOLOGICAL INFORMATION

Ecotoxicity	Data is lacking and inconclusive for this product.
Persistence/Degradability	Data is lacking and inconclusive for this product.
Bio Accumulative Potential	Data is lacking and inconclusive for this product.

## SAFETY DATA SHEET



**Mobility in Soil**  
**Other Adverse Effects**

Data is lacking and inconclusive for this product.  
 Data is lacking and inconclusive for this product.

### 13. DISPOSAL CONSIDERATIONS

**Description of Waste**

No data available.

**Methods of Disposal**

Consult local/regional/national/international regulations for compliance.  
 The liquid nature of this product may restrict disposal options. Non-contaminated paint may be returned to the manufacturer for proper disposal. The dried paint generally does not exhibit any characteristics of hazardous waste.

### 14. TRANSPORT INFORMATION

**UN Number**

**DOT, IMDG, IATA**

n. ap.

**Proper Shipping Name**

**DOT, IMDG, IATA**

n. ap.

**Hazard Class(es)**

DOT – Not Regulated

**DOT, IMDG, IATA**

ICAO/IATA – Not Dangerous or not hazardous goods not restricted for transport by air.

IMDG – Not Regulated

**Packaging Group**

DOT – Not Regulated

**DOT, IMDG, IATA**

ICAO/IATA – Not Dangerous or not hazardous goods not restricted for transport by air.

IMDG – Not Regulated

**Environmental Hazards**

**DOT, IMDG, IATA**

n. ap.

**Special Precautions**

**DOT, IMDG, IATA**

n. ap.

### 15. OTHER REGULATORY INFORMATION

This product contains 1-2% nitric acid CAS# 7697-37-2

RQ = 1000 lbs.

TPQ = 1000 lbs.

		Component	CAS No
	SARA 302	Nitric Acid	7697-37-2
	SARA 313	Nitric Acid	7697-37-2
	SARA 311/312	Nitric Acid	7697-37-2
CERCLA		Nitric Acid	7697-37-2
CERCLA – Hazardous Substance		Nitric Acid	7697-37-2
Clean Water Act Section 311		Nitric Acid	7697-37-2
OSHA		Nitric Acid	7697-37-2
WHIMIS		Nitric Acid	7697-37-2
Massachusetts Right to Know		Nitric Acid	7697-37-2

## SAFETY DATA SHEET

<p><b>Pennsylvania Right to Know</b></p> <p><b>New Jersey Right to Know</b></p> <p><b>California Proposition 65 Warnings</b></p>	<p>Nitric Acid 7697-37-2</p> <p>Nitric Acid 7697-37-2</p> <p>This product does not contain any material or ingredient that the State of California has found to cause cancer which would require a warning under the statute.</p>
----------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<b>TSCA Inventory</b>	All substances contained in this product are listed in the Toxic Substances Control Act Chemical Substance Inventory.
-----------------------	-----------------------------------------------------------------------------------------------------------------------

<b>HMIS (USA)</b>	<p>HEALTH 1</p> <p>FLAMMABILITY 0</p> <p>REACTIVITY 0</p> <p>PERSONAL PROTECTION E</p>
-------------------	----------------------------------------------------------------------------------------

<b>NFPA (USA)</b>	 <p>Health Flammability Reactivity Specific Hazard</p>
-------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------

**Protective Equipment**



### 16. OTHER INFORMATION

<b>SDS Number:</b>	1066
<b>SDS Revision Number:</b>	2.1.0
<b>SDS Preparation or Revision Date:</b>	January 6, 2020
<b>SDS Prepared By:</b>	T. Greene
<b>Date Printed</b>	January 6, 2020

**Abbreviations**

<b>Not Available</b>	n. av.
<b>Not Applicable</b>	n. ap.
<b>DOT</b>	US Department of Transportation
<b>IATA</b>	International Air Transportation Association
<b>IMDG</b>	International Maritime Code for Dangerous Goods
<b>ICAO</b>	International Civilian Aviation Organization
<b>GHS</b>	Globally Harmonized System of Classification and Labelling of Chemicals
<b>CAS</b>	Chemical Abstract Service
<b>HMIS</b>	Hazardous Materials Identification System (US)
<b>NFPA</b>	National Fire Protection Association (US)
<b>LC50</b>	Lethal concentration, 50 percent
<b>LD50</b>	Lethal dose, 50 percent
<b>STOT</b>	Specific Target Organ Toxicity
<b>RQ</b>	Reportable Quantity
<b>TPQ</b>	Threshold Planning Quantity

## SAFETY DATA SHEET

<b>CERCLA</b>	Comprehensive Environmental Response, Compensation and Liability Act
<b>SARA</b>	Superfund Amendments and Reauthorization Act
<b>TSCA</b>	Toxic Substances Control Act
<b>RTK</b>	Right to Know
<b>EPCRA</b>	Emergency Planning and Community Right to Know Act
<b>TLV</b>	Threshold Limit Values
<b>PEL</b>	Permissible Exposure Limits

Although reasonable care has been taken in the preparation of the information contained herein, the manufacturer extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for the application to purchaser's intended purposes or for consequences of its use.

Consolidated Metal Products LLC ("CMP") MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. This product is not designed for personal non-commercial use. User is responsible for determining whether this product is fit for a particular purpose and suitable for user's application. IN NO EVENT WILL CMP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSSES INCLUDING, BUT NOT LIMITED TO LOSS OF PROFITS, IN ANY WAY RELATED TO THE PRODUCTS REGARDLESS OF THE LEGAL THEORY ASSERTED.

\*\*\*\*Caution: HMIS ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS ratings are not required on SDS's under §29 CFR 1910.1200 the preparer may choose to provide them. HMIS ratings are to be used only in conjunction with a fully implemented HMIS program by workers who have received appropriate HMIS training. HMIS is a registered trade and service mark of the NPCA. HMIS materials may be purchased exclusively from J.J. Keller (800) 327-6868.