

MATERIAL SAFETY DATA SHEET

Ferro Corporation Performance Pigments & Colors 251 West Wylie Ave. Washington, PA 15301 USA

Emergency telephone number

CHEMTREC: 1-800-424-9300 CHEMTREC (outside U.S.): 1-703-527-3887

Phone Number: 1-724-223-5900

IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

100 LB DRUM **Product Name:** C-202EZ Blue Date of Preparation: 09/15/2011

Chemical Family: Inorganic Pigment

CAS-No.: Mixture **Product Code:** 1026571

2. HAZARDS IDENTIFICATION

Emergency Overview

Warning

May cause respiratory tract, eye and skin irritation. May be harmful by inhalation. May cause allergic skin or respiratory reaction. Avoid dust formation. Contains crystalline silica which causes silicosis and lung cancer. May cause physical irritation.

		HMIS	NFPA 704
Color:	Blue	2*	2
Physical state: Odor:	Powder Odorless	0	0
		0	0
	Guonos	E	

Potential Health Effects

Principle routes of exposure: Inhalation, ingestion, skin and eye contact.

Eye contact: May cause slight irritation.

Prolonged skin contact may cause skin irritation and/or dermatitis. May cause allergic skin Skin contact:

reaction.

Inhalation: May cause irritation of respiratory tract. May be harmful by inhalation. May cause severe

allergic respiratory reaction.

Ingestion: May irritate digestive tract.

Excessive inhalation of dust may cause chemical pneumonitis, cyanosis, and pulmonary **Chronic toxicity:**

edema. Suspect cancer hazard (cobalt compound). Respirable crystalline silica has been classified as a Group I (sufficient evidence in humans for carcinogenicity) carcinogenic by IARC and is listed by NTP as a substance which may reasonably be anticipated to be a

carcinogen. Long term inhalation causes lung damage (silicosis and cancer).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %
Cobalt silicate blue olivine	68187-40-6	70 - 80%
Quartz silica	14808-60-7	20 - 30%
Silica, fumed	112945-52-5	0.5 - 1%

4. FIRST AID MEASURES

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Eye contact: Rinse immediately with plenty of water, also under the eyelids. Get medical attention if irritation

develops.

Skin contact: Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing

before re-use. If symptoms persist, call a physician.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

Ingestion: Drink plenty of water. Do not induce vomiting. Consult a physician if necessary.

Notes to physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash point (°C): Non combustible

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding

environment. The product itself does not burn.

Hazardous decomposition products: Metal fumes.

Special protective equipment for

firefighters:

As in any fire, wear self-contained breathing apparatus (pressure-demand, NIOSH approved or

equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid dust formation. Evacuate area of all unnecessary personnel. Avoid contact with skin,

eyes and clothing. Wear personal protective equipment. Ensure adequate ventilation.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Do not flush

into surface water or sanitary sewer system.

Methods for cleaning up: Wear personal protective equipment. Sweep up and shovel into suitable containers for

disposal. Clean contaminated surface thoroughly. Dispose of promptly.

7. HANDLING AND STORAGE

Handling:

Handle in accordance with good industrial hygiene and safety practice. Avoid dust formation. Avoid contact with skin, eyes and clothing. Wash hands thoroughly before eating, drinking or smoking. In case of insufficient ventilation, wear suitable respiratory equipment. Provide appropriate exhaust ventilation at places where dust is formed. Use only in well-ventilated areas.

Storage:

Keep container tightly closed in a dry and well-ventilated place. Store in original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits

Minimize exposure in accordance with good hygiene practice.

Components	OSHA	ACGIH
Quartz silica	Listed	0.025 mg/m ³ TWA respirable fraction

Engineering measures: Provide appropriate exhaust ventilation at machinery and at places where dust or fumes can

be generated. Ensure adequate ventilation, especially in confined areas.

Eye protection: Safety glasses with side-shields.

Skin and body protection: Lightweight protective clothing.

Hand protection: Impervious gloves.

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Respiratory protection: Use NIOSH approved respirator when ventilation is inadequate. In case of insufficient

ventilation wear suitable respiratory equipment. Seek professional advise prior to respirator selection and use. NIOSH-approved respirators should be worn where engineering controls

and work practices do not reduce exposure to or below the PEL.

Hygiene measures: Wash hands before breaks and at the end of workday. Contaminated work clothing should not

be allowed out of the workplace. Ensure that eyewash stations and safety showers are

proximal to the work-station location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color: Blue Physical state: Powder

Odor:OdorlessMolecular weight:No data availableBoiling point/range (°C):No data availablepH:No data availableMelting point/range (°C):No data availableSpecific gravity (Water =1):No data availableVapor density:Non-volatileVapor pressure :No data available

Evaporation Rate (Water = 1) Non-volatile Water solubility: Insoluble

VOC content (%) 0

10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions.

Polymerization Will not occur.

Hazardous decomposition products: None under normal use.

Materials to avoid: None known.

Conditions to avoid None known.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Information given is based on data on the components and the toxicology of similar products

Chronic Toxicity: Contains crystalline silica which causes silicosis and lung cancer.

Carcinogenic Effects: IARC has identified Cobalt and Cobalt compounds as "possibly carcinogenic" as a group.

Respirable crystalline silica has been classified as a Group I (sufficient evidence in humans for carcinogenicity) carcinogenic by IARC and is listed by NTP as a substance which may reasonably be anticipated to be a carcinogen. Crystalline silica is also a known cause of silicosis, a non-cancerous lung disease caused by excessive exposure to crystalline silica.

Target Organ Effects: Cobalt compound: Skin, respiratory system. Silica: Respiratory system.

Component information, if any, is listed below

Cobalt silicate blue olivine

OSHA - Select Carcinogens: Present Listed

Quartz silica

LD50s and **LC50s**: Oral LD50 (Rat) = 500 mg/kg

OSHA - Select Carcinogens: Present

NTP: Known Human Carcinogen

IARC - Group 1: Listed

Silica, fumed

LD50s and **LC50s**: Oral LD50 (Rat) = 3160 mg/kg

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12. ECOLOGICAL INFORMATION

Aquatic toxicity: No data is available on the product itself. Information given is based on data on the

components and the ecotoxicology of similar products.

Persistence and degradability: Not determined

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused

products:

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Where possible recycling is preferred to disposal or incineration.

14. TRANSPORT INFORMATION

DOT (U.S.)

Proper shipping name: Not regulated.

TDG (Canada)

Proper shipping name: Not regulated.

15. REGULATORY INFORMATION

U.S. Regulations:

TSCA: Not subject to TSCA 12(b) Export Notification

SARA 313:

Components	U.S CERCLA/SARA - Section 313 - Emission Reporting
Cobalt compounds (40 - 50%)	0.1 % de minimis concentration

State Regulations

This product or its ingredients have been evaluated for New Jersey, Pennsylvania, and California Prop 65 supplier notification requirements. Substances that are subject to notification requirements, if any, are listed below.

Components	PARTK:
Cobalt compounds	Listed (PARTK)

Components	NJRTK:
Quartz silica	Listed (NJRTK)
Cobalt compounds	Listed (NJRTK)

Components	State Regulation - CA Prop65
Quartz silica	Carcinogen
Cobalt compounds	Carcinogen

Canadian WHMIS

WHMIS hazard class: D2B Toxic materials D2A Very toxic materials

Canadian Ingredient Disclosure List (IDL):

Components	Canada - WHMIS Ingredient Disclosure:
Quartz silica	1
Cobalt compounds	0.1

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International Inventories

TSCA 8(b): Listed or exempt.

Canadian DSL/NDSL list All ingredient(s) are listed on the DSL or NDSL

EC-No. Listed or exempt.

Philippines (PICCS): Listed.

Japan (ENCS): Listed or exempt.

Korea (KECL): Listed.
China (IECS): Listed.
Australia (AICS): Listed.
New Zealand (NZIoC): Listed.

16. OTHER INFORMATION

For Industrial Use Only.

Prepared by: Ferro Technical Center

The information and recommendations contained in this Material Safety Data Sheet have been compiled from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the MSDS was prepared. No warranty, guaranty or representation is made as to the correctness or sufficiency of the information. The user of this product must decide what safety measures are necessary to safely use this product, either alone or in combination with other products, and determine its environmental regulatory compliance obligations under any applicable federal or state laws.

End of Safety Data Sheet

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