

According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

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SECTION 1. IDENTIFICATION

Product name : 1429107

QS Grenadine Gray DRY 1.2LB Pak

Material number : 1429107

Manufacturer or supplier's details

Company name of supplier : Ferro Corporation

Address : 6060 Parkland Blvd. Suite 250

Mayfield Heights OH 44124-4185

Telephone : (216) 875-5600

Emergency telephone number

In-Country Number : (800)424-9300

CHEMTREC Global Number : +(1)-703-527-3887 (Call Collect)

Recommended use of the chemical and restrictions on use

Recommended use : Consult the technical guidelines for the use of this

substance/mixture.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : metal oxide/hydroxide, organic dye, inorganic pigment

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
Co-Al spinel blue CI Pigment Blue 28	1345-16-0	>= 10 - < 20
C.I. Pigment Blue 15	147-14-8	>= 5 - < 10
dichromium trioxide	1308-38-9	>= 5 - < 10

SECTION 4. FIRST AID MEASURES

General advice : Consult a physician. If inhaled : Remove to fresh air.

If symptoms persist, call a physician.

In case of skin contact : If skin irritation persists, call a physician.

In case of eye contact : Rinse immediately with plenty of water and seek medical



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advice.

If swallowed : If accidentally swallowed obtain immediate medical attention.

Most important symptoms and effects, both acute and

delayed

: None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Specific hazards during : Do not allow run-off from fire fighting to enter drains or water

courses.

Special protective equipment

for firefighters

firefighting

: In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Follow safe handling advice and personal protective

equipment recommendations.

Environmental precautions : Do not allow uncontrolled discharge of product into the

environment.

Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Clean contaminated floors and objects thoroughly while

observing environmental regulations.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling Conditions for safe storage

Avoid inhalation, ingestion and contact with skin and eyes.Keep container tightly closed in a dry and well-ventilated

place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Co-Al spinel blue CI Pigment Blue 28	1345-16-0	TWA	0.02 mg/m3 (Cobalt)	ACGIH
		PEL	0.1 mg/m3 (Cobalt)	OSHA P0
		PEL	0.05 mg/m3 (Cobalt)	NIOSH REL
C.I. Pigment Blue 15	147-14-8	TWA	1 mg/m3	NIOSH REL



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			(Copper)	
dichromium trioxide	1308-38-9	TWA	0.5 mg/m3 (chromium)	OSHA Z-1
		TWA	0.5 mg/m3 (chromium)	ACGIH
		TWA	1 mg/m3	OSHA P0
		TWA	0.5 mg/m3 (chromium)	NIOSH REL
		TWA	1 mg/m3 (chromium)	OSHA Z-1

Biological occupational exposure limits

Components	CAS-No.	Control	Biological	Sampling	Permissible	Basis
		parameters	specimen	time	concentration	
Co-Al spinel blue Cl Pigment Blue 28	1345-16-0	Cobalt	Urine		0.015 mg/l	ACGIH BEI
		Cobalt	Blood		0.001 mg/l	ACGIH BEI

Engineering measures : Apply technical measures to comply with the occupational

exposure limits.

Provide adequate ventilation.

Personal protective equipment

Respiratory protection When workers are facing concentrations above the exposure

limit they must use appropriate certified respirators.

Hand protection For prolonged or repeated contact use protective gloves.

Eye protection Safety glasses

Protective measures Wear suitable protective equipment.

When using do not eat, drink or smoke.

Hygiene measures : Wash hands before breaks and immediately after handling

the product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance powder Colour : grey Odour : odourless

Odour Threshold : No data available

Melting point/freezing point Boiling point/boiling range

Flash point

Not applicable Upper explosion limit No data available

Lower explosion limit : No data available

Relative vapour density

Solubility(ies)

: No data available

: No data available

: No data available

: insoluble Water solubility



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Auto-ignition temperature : Not determined
Oxidizing properties : No data available
Refractive index : Not applicable

Volatile organic compounds

(VOC) content

: 0 %

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final

VOC's (40 CFR 60.489).

This product does not contain any VOC exemptions listed

under the U.S. Clean Air Act Section 450.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : The product is chemically stable.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

inhalation (dust/mist/fume)

Skin

Eye contact

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

Components:

Co-Al spinel blue Cl Pigment Blue 28:

Acute oral toxicity : LD50 (Rat, male): > 10,000 mg/kg

Method: OECD Test Guideline 401

GLP: no

C.I. Pigment Blue 15:

Acute oral toxicity : LD50 Oral (Rat): > 10,000 mg/kg

dichromium trioxide:

Acute oral toxicity : LD50 (Rat, male and female): 5,000 mg/kg

Method: OECD Test Guideline 401

GLP: yes

Assessment: The substance or mixture has no acute oral

toxicity

Skin corrosion/irritation

Not classified based on available information.



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Components:

Co-Al spinel blue Cl Pigment Blue 28:

Species: Rabbit Exposure time: 4 h

Assessment: No skin irritation Method: OECD Test Guideline 404

Result: No skin irritation

GLP: no

dichromium trioxide:

Species: Rabbit Exposure time: 24 h

Assessment: No skin irritation Method: OECD Test Guideline 404

Result: No skin irritation

GLP: no

Serious eye damage/eye irritation

Not classified based on available information.

Components:

Co-Al spinel blue Cl Pigment Blue 28:

Species: Rabbit Result: No eye irritation Exposure time: 1 h

Assessment: No eye irritation Method: OECD Test Guideline 405

GLP: yes

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information. Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

IARC

No component of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

OSHA No component of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

NTP No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.



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Reproductive toxicity

Not classified based on available information.

STOT Specific Target Organ Toxicity - single exposure

Not classified based on available information.

STOT Specific Target Organ Toxicity - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Co-Al spinel blue Cl Pigment Blue 28:

Toxicity to fish : LC50 (Fish): 1,000 mg/l

Exposure time: 96 h

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia (water flea)): 10,000 mg/l

Exposure time: 48 h

dichromium trioxide:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 10,000 mg/l

> Exposure time: 96 h Test Type: static test Method: ISO 7346/1

GLP: yes

Persistence and degradability

Components:

Co-Al spinel blue Cl Pigment Blue 28:

Biodegradability : Remarks: No data available

C.I. Pigment Blue 15:

: Remarks: No data available Biodegradability

dichromium trioxide:

: Remarks: No data available Biodegradability

Bioaccumulative potential

Components:

Co-Al spinel blue Cl Pigment Blue 28:

Bioaccumulation : Remarks: No data available

C.I. Pigment Blue 15:



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Bioaccumulation : Remarks: No data available

Partition coefficient: n-

octanol/water

: Pow: 6.6 (25 °C)

dichromium trioxide:

Bioaccumulation : Remarks: No data available

Mobility in soil

Components:

Co-Al spinel blue Cl Pigment Blue 28:

Distribution among : Remarks: No data available

environmental compartments

C.I. Pigment Blue 15:

: Remarks: No data available Distribution among

environmental compartments

dichromium trioxide:

Distribution among : Remarks: No data available

environmental compartments

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82

Protection of Stratospheric Ozone - CAA Section 602 Class I

Substances

Remarks: This product neither contains, nor was

manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A +

B).

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of wastes in an approved waste disposal facility.

SECTION 14. TRANSPORT INFORMATION

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

49 CFR



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Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

TSCA list : TSCA_12b - Not relevant

TSCA list : TSCA 5a - Not relevant

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

SARA 313 : This product contains components that are reportable under

the regulation.

Cobalt, inorganic compounds

Chromium III Compounds

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product contains components that are reportable under the regulation.

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product contains components that are reportable under the regulation.

Massachusetts Right To Know

This product contains components that are reportable under the regulation.

Pennsylvania Right To Know



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This product contains components that are reportable under

the regulation.

New Jersey Right To Know

This product contains components that are reportable under

the regulation.

California Prop 65 This product does not contain any chemicals known to State

of California to cause cancer, birth defects, or any other

reproductive harm.

The components of this product are reported in the following inventories:

EINECS (European Union) : On the inventory, or in compliance with the inventory

SWISS (Switzerland) : On the inventory, or in compliance with the inventory

TSCA (United States) : On TSCA Inventory

DSL/NDSL (Canada) : All components of this product are on the Canadian DSL.

AICS (Australia) : On the inventory, or in compliance with the inventory

NZioC (New Zealand) : On the inventory, or in compliance with the inventory

ENCS (Japan) : On the inventory, or in compliance with the inventory

ISHL (Japan) : On the inventory, or in compliance with the inventory

KECI (Korea) : On the inventory, or in compliance with the inventory

PICCS (Philippines) : On the inventory, or in compliance with the inventory

IECSC (China) : On the inventory, or in compliance with the inventory

TCSI (Taiwan) : On the inventory, or in compliance with the inventory

CICR (Turkey) : On the inventory, or in compliance with the inventory

INSQ (Mexico) : On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

Revision Date : 02/27/2020

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the



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specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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