

SAFETY DATA SHEET



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

1429086		QS Aruba Sky DRY 1.6LB Pak	
Product specification	RS_FP_606352	Revision Date	02/27/2020
Version	1.0	Print Date	02/28/2020
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SECTION 1. IDENTIFICATION

Product name : **1429086**
QS Aruba Sky DRY 1.6LB Pak

Material number : **1429086**

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 (%)
dichromium trioxide	1308-38-9	>= 20 - < 30
Co-Al spinel blue CI Pigment Blue 28	1345-16-0	>= 20 - < 30
C.I. Pigment Blue 15	147-14-8	>= 10 - < 20

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 firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
Special protective equipment for firefighters : 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 : Avoid inhalation, ingestion and contact with skin and eyes.
Conditions for safe storage : 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
dichromium trioxide	1308-38-9	TWA	0.5 mg/m ³ (chromium)	OSHA Z-1
		TWA	0.5 mg/m ³ (chromium)	ACGIH
		TWA	1 mg/m ³	OSHA P0
		TWA	0.5 mg/m ³ (chromium)	NIOSH REL

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		TWA	1 mg/m3 (chromium)	OSHA Z-1
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 (Copper)	NIOSH REL

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Co-Al spinel blue CI 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 : blue
Odour : odourless
Odour Threshold : No data available

Melting point/freezing point : No data available
Boiling point/boiling range : No data available
Flash point : Not applicable
Upper explosion limit : No data available

Lower explosion limit : No data available

Relative vapour density : No data available
Solubility(ies)
Water solubility : insoluble

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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 SOCM I 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:

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

Co-Al spinel blue CI 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

Skin corrosion/irritation

Not classified based on available information.

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Components:

dichromium trioxide:

Species: Rabbit
Exposure time: 24 h
Assessment: No skin irritation
Method: OECD Test Guideline 404
Result: No skin irritation
GLP: no

Co-Al spinel blue CI Pigment Blue 28:

Species: Rabbit
Exposure time: 4 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 CI 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:*****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

Co-Al spinel blue CI Pigment Blue 28:

Toxicity to fish : LC50 (Fish): 1,000 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 10,000 mg/l
Exposure time: 48 h

Persistence and degradability**Components:*****dichromium trioxide:***

Biodegradability : Remarks: No data available

Co-Al spinel blue CI Pigment Blue 28:

Biodegradability : Remarks: No data available

C.I. Pigment Blue 15:

Biodegradability : Remarks: No data available

Bioaccumulative potential**Components:*****dichromium trioxide:***

Bioaccumulation : Remarks: No data available

Co-Al spinel blue CI Pigment Blue 28:

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Bioaccumulation : Remarks: No data available

C.I. Pigment Blue 15:

Bioaccumulation : Remarks: No data available

Partition coefficient: n-octanol/water : Pow: 6.6 (25 °C)

Mobility in soil

Components:

dichromium trioxide:

Distribution among environmental compartments : Remarks: No data available

Co-Al spinel blue CI Pigment Blue 28:

Distribution among environmental compartments : Remarks: No data available

C.I. Pigment Blue 15:

Distribution among environmental compartments : Remarks: No data available

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 SOCM I 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.

US / EN