

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

 1146177
 UC Laguna Plus Pigment Pak 2.4 Lb

 Product specification
 RS_FP_606571
 Revision Date
 09/09/2020

 Version
 1.0
 Print Date
 09/03/2021

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SECTION 1. IDENTIFICATION

Product name : **1146177**

UC Laguna Plus Pigment Pak 2.4 Lb

Material number : 1146177

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 : Industrial use

Restrictions on use : Reserved for industrial and professional use.

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, inorganic pigment

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
Co-Cr-Al spinel blue green	68187-11-1	>= 5 - < 10
Co-Al spinel blue CI Pigment Blue 28	1345-16-0	>= 1 - < 5

SECTION 4. FIRST AID MEASURES

General advice : Consult a physician.

If inhaled : If unconscious place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact : Take off contaminated clothing and shoes immediately.

In case of eye contact



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Wash off with soap and plenty of water.

: Flush eyes with water as a precaution.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water.

Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

Most important symptoms and effects, both acute and

delayed

None known.

SECTION 5. FIREFIGHTING MEASURES

Specific hazards during

firefighting

: Do not use a solid water stream as it may scatter and spread

fire.

Cool closed containers exposed to fire with water spray.

Hazardous combustion

products

: No hazardous combustion products are known

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

: Use personal protective equipment.

Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions : Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up

: Keep in suitable, closed containers for disposal.

Clean contaminated floors and objects thoroughly while

observing environmental regulations.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters



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Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Co-Cr-Al spinel blue green	68187-11-1	TWA	0.5 mg/m3 (chromium)	OSHA Z-1
		TWA	0.02 mg/m3 (Cobalt)	ACGIH
		TWA	0.5 mg/m3 (chromium)	NIOSH REL
		TWA	0.5 mg/m3 (chromium)	ACGIH
Co-Al spinel blue Cl 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

Biological occupational exposure limits

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

Engineering measures : No data available

Personal protective equipment

Eye protection : Safety glasses

Ensure that eyewash stations and safety showers are close

to the workstation location.

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.

Remove contaminated clothing and protective equipment

before entering eating areas.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder Colour : dark blue Odour : odourless

Odour Threshold : No data available

pH : Not applicable
Melting point/range : No data available
Boiling point/boiling range : Not applicable



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Flash point : Not applicable Evaporation rate : Not applicable

Flammability (solid, gas) : No data available

Burning rate : No data available Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

Vapour pressure : Not applicable Relative vapour density : Not applicable

Relative density : No data available

Bulk density : No data available

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

Auto-ignition temperature Decomposition temperature

Viscosity

Viscosity, kinematic : Not applicable

Explosive properties : No data available
Oxidizing properties : Not applicable
Refractive index : Not applicable

Volatile organic compounds

(VOC) content

: 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.

No hazards to be specially mentioned.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable under recommended storage conditions.
Chemical stability : No decomposition if stored and applied as directed.

: No data available

: Not determined

: No data available

Possibility of hazardous

reactions

Conditions to avoid : No data available Incompatible materials : No data available Hazardous decomposition : No data available

products



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SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

inhalation (dust/mist/fume)

Skin Ingestion Eye contact

Acute toxicity

Not classified based on available information.

Components:

Co-Cr-Al spinel blue green:

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

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

Skin corrosion/irritation

Not classified based on available information.

Components:

Co-Cr-Al spinel blue green:

Species: human keratinocytes Method: OECD Test Guideline 439

Result: No skin irritation

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-Cr-Al spinel blue green:

Species: Rabbit

Result: No eye irritation Exposure time: 72 h

Method: OECD Test Guideline 405

GLP: yes

Co-Al spinel blue Cl Pigment Blue 28:

Species: Rabbit

Result: No eye irritation



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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.

OSHANo 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.

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-Cr-Al spinel blue green:

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

Co-Al spinel blue CI Pigment Blue 28:



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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:

Co-Cr-Al spinel blue green:

Biodegradability : Remarks: No data available

Co-Al spinel blue CI Pigment Blue 28:

Biodegradability : Remarks: No data available

Bioaccumulative potential

Components:

Co-Cr-Al spinel blue green:

Bioaccumulation : Remarks: No data available

Co-Al spinel blue Cl Pigment Blue 28:

Bioaccumulation : Remarks: No data available

Mobility in soil

Components:

Co-Cr-Al spinel blue green:

Distribution among : Remarks: No data available

environmental compartments

Co-Al spinel blue CI Pigment Blue 28:

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.



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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

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.

Chromium III CompoundsCobalt,

inorganic compounds

Cobalt, inorganic 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).



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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

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



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INSQ (Mexico) : Not in compliance with the inventory

SECTION 16. OTHER INFORMATION

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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 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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