

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

40-31013 PS SKY BLUE LIQ Bottle 1437301 Product specification 08/03/2020 RS\_FP\_606534 **Revision Date** Version 1.1 Print Date 08/04/2020 Page Material number 1437301 Page 1 of 12

## **SECTION 1. IDENTIFICATION**

Product name 1437301

40-31013 PS SKY BLUE LIQ Bottle

Material number : 1437301

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

Industrial use Recommended use

Restrictions on use Reserved for industrial and professional use.

## **SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification** 

Eye irritation : Category 2A

**GHS Label element** 

Hazard pictograms

Signal word Warning

Hazard statements H319 Causes serious eye irritation.

Precautionary statements Prevention:

P264 Wash skin thoroughly after handling.

P280 Wear eye protection/ face

protection.

Response:

P305 + P351 +

IF IN EYES: Rinse cautiously with P338 water for several minutes. Remove

contact lenses, if present and easy

to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical

advice/ attention.

### Other hazards



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None known.

### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

Chemical nature : water, salt of organic acids/bases, inorganic pigment,

inorganic salt

#### **Hazardous components**

Chemical Name	CAS-No.	Concentration (%)
Co-Al spinel blue Cl Pigment Blue 28	1345-16-0	>= 20 - < 30
Co-Cr-Al spinel blue green	68187-11-1	>= 10 - < 20
barium sulphate	7727-43-7	>= 1 - < 5
docusate sodium	577-11-7	>= 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.

Wash off with soap and plenty of water.

Take off contaminated clothing and shoes immediately.

If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : 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.

Remove contact lenses.

Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes.

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

: Causes serious eye irritation.

## **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.



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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.

Keep people away from and upwind of spill/leak.

Material can create slippery conditions.

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 : Avoid contact with skin and eyes.

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

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
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



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barium sulphate	7727-43-7	TWA (Respirable)	5 mg/m3	NIOSH REL
		TWA (total)	10 mg/m3	NIOSH REL
		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Total dust)	10 mg/m3	OSHA P0
		TWA (respirable dust fraction)	5 mg/m3	OSHA P0
		TWA (Inhalable fraction)	5 mg/m3	ACGIH

## Hazardous components without workplace control parameters

Components	CAS-No.
docusate sodium	577-11-7

## **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** : No data available

Personal protective equipment

Hygiene measures

Eye protection : Wear face-shield and protective suit for abnormal processing

problems.

Do not wear contact lenses.

Protective measures : Wear suitable protective equipment.

Avoid contact with skin.

When using do not eat, drink or smoke.

: Avoid contact with skin, eyes and clothing.

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 : paste Colour : blue

Odour : characteristic
Odour Threshold : No data available



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pH : No data available
Melting point/range : No data available
Boiling point/boiling range : No data available
Flash point : No data available
Evaporation rate : No data available

Flammability (solid, gas) : No data available

Burning rate : No data available Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available Relative vapour density : No data available

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 : > 411 mm2/s (23 °C)

> 473 mm2/s (20 °C)

: No data available

: Not determined

: No data available

Flow time : 61 s at 23 °C

Cross section: 6 mm Method: ISO 2431

> 100 s at 23 °C Cross section: 4 mm Method: ISO 2431

>= 90 s at 20 °C Cross section: 4 mm Method: DIN 53211

>= 30 s at 23 °C Cross section: 3 mm Method: ISO 2431

Explosive properties : No data available



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Oxidizing properties : Not applicable Refractive index : No data available

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.

## **SECTION 10. STABILITY AND REACTIVITY**

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

Possibility of hazardous : No hazards to be specially mentioned.

reactions

No decomposition if stored and applied as directed.

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

products

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

## Information on likely routes of exposure

inhalation (dust/mist/fume) inhalation (vapour) Skin Ingestion

Eye contact Skin Absorption

## **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

Co-Cr-Al spinel blue green:

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

docusate sodium:

Acute oral toxicity : LD50 Oral (Rat): > 3,000 mg/kg

Method: OECD Test Guideline 401



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Acute dermal toxicity : LD50 Dermal (Rabbit): > 10,000 mg/kg Method: OECD Test Guideline 402

#### Skin corrosion/irritation

Not classified based on available information.

#### **Components:**

## 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

## Co-Cr-Al spinel blue green:

Species: human keratinocytes Method: OECD Test Guideline 439

Result: No skin irritation

### docusate sodium:

Species: Rabbit

Method: OECD Test Guideline 404

Result: Irritating to skin.

## Serious eye damage/eye irritation

Causes serious eye irritation.

## **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

## Co-Cr-Al spinel blue green:

Species: Rabbit

Result: No eye irritation Exposure time: 72 h

Method: OECD Test Guideline 405

GLP: yes

## docusate sodium:

Species: Rabbit

Result: Risk of serious damage to eyes.

Exposure time: 72 h

Method: OECD Test Guideline 405



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## 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.

#### 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

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia (water flea)): 10,000 mg/l

Exposure time: 48 h

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



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docusate sodium:

Toxicity to fish : LC50 (Fish): 20 mg/l

Exposure time: 96 h

Test Type: flow-through test

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia (water flea)): 36 mg/l

Exposure time: 48 h Test Type: static test

## Persistence and degradability

Components:

Co-Al spinel blue Cl Pigment Blue 28:

Biodegradability : Remarks: No data available

Co-Cr-Al spinel blue green:

Biodegradability : Remarks: No data available

barium sulphate:

Biodegradability : Remarks: No data available

docusate sodium:

Biodegradability : Remarks: No data available

## **Bioaccumulative potential**

**Components:** 

Co-Al spinel blue Cl Pigment Blue 28:

Bioaccumulation : Remarks: No data available

Co-Cr-Al spinel blue green:

Bioaccumulation : Remarks: No data available

barium sulphate:

Bioaccumulation : Remarks: No data available

docusate sodium:

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

Co-Cr-Al spinel blue green:

Distribution among : Rema

environmental compartments

barium sulphate:

: Remarks: No data available



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Distribution among

environmental compartments

docusate sodium:

Distribution among

environmental compartments

: Remarks: No data available

: 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**

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**

Components	CAS-No.	Component RQ	Calculated product RQ
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		(lbs)	(lbs)
methyloxirane	75-56-9	100	*
formaldehyde	50-00-0	100	*
1,4-Dioxane	123-91-1	100	*

<sup>\*:</sup> Calculated RQ exceeds reasonably attainable upper limit.

## SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
methyloxirane	75-56-9	100	*
formaldehyde	50-00-0	100	*

<sup>\*:</sup> Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards : Acute Health Hazard

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 CompoundsCobalt,

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).

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 contains components that are reportable under the regulation.

This product contains components that are reportable under the regulation.

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**



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This product contains components that are reportable under

the regulation.

California Prop 65 WARNING! This product contains a chemical known to the

State of California to cause cancer.

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

EINECS (European Union) : Not in compliance with the inventory

SWISS (Switzerland) : Not 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) : 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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