

SAFETY DATA SHEET

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

| | | | |
|-----------------------|--------------|---------------------------------------|--------------|
| 1437302 | | 40-41012 PS SEAFOAM LIQ Bottle | |
| Product specification | RS_FP_606537 | Revision Date | 08/03/2020 |
| Version | 1.1 | Print Date | 08/04/2020 |
| Material number | 1437302 | Page | Page 1 of 12 |

SECTION 1. IDENTIFICATION

Product name : **1437302**
40-41012 PS SEAFOAM LIQ Bottle

Material number : **1437302**

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

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, metal oxide/hydroxide

Hazardous components

| Chemical Name | CAS-No. | Concentration (%) |
|----------------------------|------------|-------------------|
| Co-Cr-Al spinel blue green | 68187-11-1 | >= 20 - < 30 |
| Co-Ti spinel green | 68186-85-6 | >= 10 - < 20 |
| titanium dioxide | 13463-67-7 | >= 10 - < 20 |
| aluminium silicate | 12141-46-7 | >= 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.
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.
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.
Hazardous combustion products : No hazardous combustion products are known
Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

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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-Cr-Al spinel blue green | 68187-11-1 | TWA | 0.5 mg/m ³ (chromium) | OSHA Z-1 |
| | | TWA | 0.02 mg/m ³ (Cobalt) | ACGIH |
| | | TWA | 0.5 mg/m ³ (chromium) | NIOSH REL |
| | | TWA | 0.5 mg/m ³ (chromium) | ACGIH |
| Co-Ti spinel green | 68186-85-6 | TWA | 0.02 mg/m ³ (Cobalt) | ACGIH |
| titanium dioxide | 13463-67-7 | TWA (total dust) | 15 mg/m ³ | OSHA Z-1 |
| | | TWA (Total dust) | 10 mg/m ³ | OSHA P0 |
| | | TWA | 10 mg/m ³ (Titanium dioxide) | ACGIH |
| aluminium silicate | 12141-46-7 | TWA (Respirable fraction) | 1 mg/m ³ (Aluminium) | ACGIH |

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Hazardous components without workplace control parameters

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

Engineering measures : No data available

Personal protective equipment

- 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.
- Hygiene measures** : 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 : green
Odour : characteristic
Odour Threshold : No data available
- 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

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| | | |
|--|---|--|
| Solubility in other solvents | : | No data available |
| Partition coefficient: n-octanol/water | : | No data available |
| Auto-ignition temperature | : | Not determined |
| Decomposition temperature | : | No data available |
| Viscosity | : | |
| Viscosity, kinematic | : | > 411 mm ² /s (23 °C) |
| | | > 473 mm ² /s (20 °C) |
| 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 |
| 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 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 | : | Stable under recommended storage conditions. |
| Chemical stability | : | No decomposition if stored and applied as directed. |
| Possibility of hazardous reactions | : | No hazards to be specially mentioned. No decomposition if stored and applied as directed. |
| Conditions to avoid | : | No data available |
| Incompatible materials | : | No data available |
| Hazardous decomposition products | : | No data available |

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SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

inhalation (dust/mist/fume)

inhalation (vapour)

Skin

Ingestion

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-Cr-Al spinel blue green:

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

Co-Ti spinel green:

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

titanium dioxide:

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

docosate sodium:

Acute oral toxicity : LD50 Oral (Rat): > 3,000 mg/kg
Method: OECD Test Guideline 401

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-Cr-Al spinel blue green:

Species: human keratinocytes

Method: OECD Test Guideline 439

Result: No skin irritation

Co-Ti spinel green:

Species: Rabbit

Exposure time: 24 h

Assessment: No skin irritation

Result: No skin irritation

GLP: no

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titanium dioxide:

Species: Rabbit
Exposure time: 4 h
Method: OECD Test Guideline 404
Result: No skin irritation
GLP: yes

docosate sodium:

Species: Rabbit
Method: OECD Test Guideline 404
Result: Irritating to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

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-Ti spinel green:

Species: Rabbit
Result: No eye irritation
Assessment: No eye irritation
GLP: no

titanium dioxide:

Species: Rabbit
Result: No eye irritation
Exposure time: 4 h
Method: OECD Test Guideline 405
GLP: yes

docosate sodium:

Species: Rabbit
Result: Risk of serious damage to eyes.
Exposure time: 72 h
Method: OECD Test Guideline 405

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.

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| | |
|-------------|---|
| 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-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-Ti spinel green:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): > 10,000 mg/l
Exposure time: 96 h
Test Type: static test
Method: DIN 38412
GLP: no

titanium dioxide:

Toxicity to fish : NOEC (Danio rerio (zebra fish)): >= 500 mg/l
Exposure time: 96 h
Test Type: semi-static test
Method: OECD Test Guideline 203
GLP: yes

docosate sodium:

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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-Cr-Al spinel blue green:

Biodegradability : Remarks: No data available

Co-Ti spinel green:

Biodegradability : Remarks: No data available

aluminium silicate:

Biodegradability : Remarks: No data available

docosate sodium:

Biodegradability : Remarks: No data available

Bioaccumulative potential

Components:

Co-Cr-Al spinel blue green:

Bioaccumulation : Remarks: No data available

Co-Ti spinel green:

Bioaccumulation : Remarks: No data available

aluminium silicate:

Bioaccumulation : Remarks: No data available

docosate sodium:

Bioaccumulation : Remarks: No data available

Mobility in soil

Components:

Co-Cr-Al spinel blue green:

Distribution among environmental compartments : Remarks: No data available

Co-Ti spinel green:

Distribution among environmental compartments : Remarks: No data available

aluminium silicate:

Distribution among environmental compartments : Remarks: No data available

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docusate sodium:

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

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 (lbs) | Calculated product RQ (lbs) |
|---------------|---------|--------------------|-----------------------------|
| methyloxirane | 75-56-9 | 100 | * |

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| | | | |
|--------------|----------|-----|---|
| formaldehyde | 50-00-0 | 100 | * |
| 1,4-Dioxane | 123-91-1 | 100 | * |

*: 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 | * |

*: 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.

Chromium III Compounds
Cobalt, inorganic compounds

Cobalt, 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).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM 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) | : Not in compliance with the inventory |
| INSQ (Mexico) | : Not in compliance with the inventory |

SECTION 16. OTHER INFORMATION

Revision Date : 08/03/2020

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 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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