

SAFETY DATA SHEET

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

1433451		Liquid Black	
Product specification	RS_FP_606588	Revision Date	09/22/2020
Version	1.0	Print Date	09/22/2020
Material number	1433451	Page	Page 1 of 10

SECTION 1. IDENTIFICATION

Product name : **1433451**
Liquid Black

Material number : **1433451**

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

Carcinogenicity : Category 2

GHS Label element

Hazard pictograms :



Signal word : Warning

Hazard statements : H351 Suspected of causing cancer.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Disposal:

SAFETY DATA SHEET



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

1433451		Liquid Black	
Product specification	RS_FP_606588	Revision Date	09/22/2020
Version	1.0	Print Date	09/22/2020
Material number	1433451	Page	Page 2 of 10

P501

Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture
Chemical nature : inorganic pigment, water

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
carbon black	1333-86-4	>= 20 - < 30
Sodium Polynaphthalenesulfonate	9084-06-4	>= 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 : Suspected of causing cancer.

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.

SAFETY DATA SHEET

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

1433451		Liquid Black	
Product specification	RS_FP_606588	Revision Date	09/22/2020
Version	1.0	Print Date	09/22/2020
Material number	1433451	Page	Page 3 of 10

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Evacuate personnel to safe areas.
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 : 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
carbon black	1333-86-4	TWA	3.5 mg/m ³	NIOSH REL
		TWA	3.5 mg/m ³	OSHA Z-1
		TWA	3.5 mg/m ³	OSHA P0
		TWA	0.1 mg/m ³ (PAHs)	NIOSH REL
		TWA (Inhalable fraction)	3 mg/m ³	ACGIH

Hazardous components without workplace control parameters

Components	CAS-No.
Sodium Polynaphthalenesulfonate	9084-06-4

- 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.

SAFETY DATA SHEET

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

1433451		Liquid Black	
Product specification	RS_FP_606588	Revision Date	09/22/2020
Version	1.0	Print Date	09/22/2020
Material number	1433451	Page	Page 4 of 10

Hygiene measures : Avoid contact with skin.
When using do not eat, drink or smoke.
: 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 : black
Odour : odourless
Odour Threshold : No data available

pH : No data available
Melting point/range : No data available
Boiling point/boiling range : 100 °C

Flash point : > 110 °C

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 : 1.12

Bulk density : No data available

Solubility(ies)
Water solubility : soluble

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 mm²/s (23 °C)
> 473 mm²/s (20 °C)

Flow time : 61 s at 23 °C

SAFETY DATA SHEET



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

1433451		Liquid Black	
Product specification	RS_FP_606588	Revision Date	09/22/2020
Version	1.0	Print Date	09/22/2020
Material number	1433451	Page	Page 5 of 10

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

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.

Components:

carbon black:

Acute oral toxicity : LD50 Oral (Rat): > 15,400 mg/kg

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard 29CFR 1910.1200
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1433451		Liquid Black	
Product specification	RS_FP_606588	Revision Date	09/22/2020
Version	1.0	Print Date	09/22/2020
Material number	1433451	Page	Page 6 of 10

Sodium Polynaphthalenesulfonate:

Acute oral toxicity : LD50 Oral (Rat): > 3,800 mg/kg

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Components:

Sodium Polynaphthalenesulfonate:

Species: Rabbit

Result: Mild eye irritation

Assessment: Irritating to eyes.

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

Suspected of causing cancer.

IARC

Group 2B: Possibly carcinogenic to humans

carbon black

1333-86-4

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.

SAFETY DATA SHEET



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1433451		Liquid Black	
Product specification	RS_FP_606588	Revision Date	09/22/2020
Version	1.0	Print Date	09/22/2020
Material number	1433451	Page	Page 7 of 10

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

Components:

carbon black:

Biodegradability : Remarks: No data available

Bioaccumulative potential

Components:

carbon black:

Bioaccumulation : Remarks: No data available

Mobility in soil

Components:

carbon black:

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

SAFETY DATA SHEET



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1433451		Liquid Black	
Product specification	RS_FP_606588	Revision Date	09/22/2020
Version	1.0	Print Date	09/22/2020
Material number	1433451	Page	Page 8 of 10

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 : Chronic Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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 does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

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 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 does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

Massachusetts Right To Know

SAFETY DATA SHEET



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1433451		Liquid Black	
Product specification	RS_FP_606588	Revision Date	09/22/2020
Version	1.0	Print Date	09/22/2020
Material number	1433451	Page	Page 9 of 10

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

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) : On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

Revision Date : 09/22/2020

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

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(HCS 2012)

1433451		Liquid Black	
Product specification	RS_FP_606588	Revision Date	09/22/2020
Version	1.0	Print Date	09/22/2020
Material number	1433451	Page	Page 10 of 10

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.

US / EN