

SAFETY DATA SHEET

According to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: **POLY FORCE FL™**

Type of product: Mixture.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Processing aid for industrial applications.

Uses advised against: None.

1.3. Details of the supplier of the safety data sheet

Company: Valence Drilling Fluids
609 S. Kelly Ave, Suite D1
Edmond, OK 73003
USA

Telephone: 405-285-6454

E-mail address:

1.4. Emergency telephone number

24-hour emergency number:
1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to paragraph (d) of 29 CFR
1910.1200: Comb. Dusts 1

2.2. Label elements

Labelling according to paragraph (f) of 29 CFR 1910.1200:

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Hazard symbol(s):	None.
Signal word:	Warning
Hazard statement(s):	May form combustible dust concentrations in air.
Precautionary statement(s):	None.

2.3. Other hazards

Aqueous solutions or powders that become wet render surfaces extremely slippery. Dust can form an explosive mixture in air.

For explanation of abbreviations see Section 16.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable, this product is a mixture.

3.2. Mixtures

Hazardous components

Contains no reportable hazardous substances.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Move to fresh air. No hazards which require special first aid measures.

Skin contact:

Wash off with soap and plenty of water. Get medical attention if irritation develops and persists.

Eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In case of persistent eye irritation, consult a physician.

Ingestion:

Rinse mouth with water. Do NOT induce vomiting. No hazards which require special first aid measures.

4.2. Most important symptoms and effects, both acute and delayed

None.

4.3. Indication of any immediate medical attention and special treatment needed

None reasonably foreseeable.

Other information:

Aqueous solutions or powders that become wet render surfaces extremely slippery.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water. Water spray. Foam. Carbon dioxide (CO₂). Dry powder.

Warning! Aqueous solutions or powders that become wet render surfaces extremely slippery.

Unsuitable extinguishing media:

None known.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products:

Thermal decomposition may produce nitrogen oxides (NO_x), carbon oxides (CO_x). Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

5.3. Advice for firefighters

Protective measures:

In the event of fire, wear self-contained breathing apparatus.

Other information:

Aqueous solutions or powders that become wet render surfaces extremely slippery. Potential dust explosion hazard.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions:

Aqueous solutions or powders that become wet render surfaces extremely slippery. Avoid breathing dust. Remove all sources of ignition. Avoid dust formation in confined areas.

Protective equipment:

Wear adequate personal protective equipment (see Section 8 Exposure Controls/Personal Protection).

Emergency procedures:

Keep people away from spill/leak. Prevent further leakage or spillage if safe to do so.

6.2. Environmental precautions

Do not allow contact with soil, surface or ground water. Prevent products from entering drains.

6.3. Methods and material for containment and cleaning up

Non-sparking tools should be used.

Small spills:

Do not flush with water. Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal. After cleaning, flush away traces with water.

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Large spills:

Do not flush with water. Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal.
After cleaning, flush away traces with water.

Residues:

Flush away with large quantities of water.

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection; SECTION 9: Physical and chemical properties; SECTION 13: Disposal considerations; SECTION 7: Handling and storage.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid dust formation. Use only explosion-proof equipment. Keep away from heat and sources of ignition. Take precautionary measures against static discharges. Aqueous solutions or powders that become wet render surfaces extremely slippery.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep away from heat and sources of ignition. Incompatible with strong acids and oxidizing agents. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:
None known.

8.2. Exposure controls

Appropriate engineering controls:

Use local exhaust if dusting occurs. Natural ventilation is adequate in absence of dusts. Ensure adequate ventilation, especially in confined areas. Use explosion-proof ventilation equipment.

Individual protection measures, such as personal protective equipment:

a) Eye/face protection:

Safety glasses with side-shields.

b) Skin protection:

i) Hand protection: PVC or other plastic material gloves.

ii) Other: Work clothes protecting arms, legs and body.

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c) Respiratory protection:

Ventilated respirator with P3 filter cartridge if respirable dust (particle size < 10 µm) exceeds 0.05 mg/m³. Dust safety masks recommended where working powder concentration is more than 10 mg/m³.

d) Additional advice:

Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls:

Do not allow uncontrolled discharge of products into the environment. Do not flush into surface water.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

a) Appearance:	Granular solid, White.
b) Odor:	None.
c) Odor Threshold:	Not applicable.
d) pH:	4 - 9 @ 5 g/L
e) Melting point/freezing point:	> 150°C
f) Initial boiling point and boiling range:	Not applicable.
g) Flash point:	Not applicable.
h) Evaporation rate:	Not applicable.
i) Flammability (solid, gas):	No data available.
j) Upper/lower flammability or explosive limits:	No data available.
k) Vapor pressure:	Not applicable.
l) Vapor density:	Not applicable.
m) Relative density:	0.2 - 0.9 (See Technical Bulletin or Product Specifications for a more precise value, if available)
n) Solubility:	Soluble in water.
o) Partition coefficient:	< 0
p) Autoignition temperature:	Does not self-ignite (based on the chemical structure).
q) Decomposition temperature:	> 150°C
r) Viscosity:	

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s)Explosive properties:

Not expected to be explosive based on the chemical structure. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

Oxidizing properties:

Not expected to be oxidizing based on the chemical structure.

9.2. Other information

None.

SECTION 10: Stability and reactivity

10.1. Reactivity

None known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Oxidizing agents may cause exothermic reactions. Powdered material may form explosive dust-air mixtures.

10.4. Conditions to avoid

Keep away from heat and sources of ignition.

10.5. Incompatible materials

Incompatible with strong acids and oxidizing agents.

10.6. Hazardous decomposition products

Thermal decomposition may produce nitrogen oxides (NO_x), carbon oxides (CO_x), hydrogen cyanide (hydrocyanic acid).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on the product supplied:

Acute oral toxicity: LD50/oral/rat > 5000 mg/kg (Estimated)

Acute dermal toxicity: LD50/dermal/rat > 5000 mg/kg. (Estimated)

Acute inhalation toxicity: The product is not expected to be toxic by inhalation.

Skin corrosion/irritation: The product is not expected to be irritating to skin and mucous membranes.

Serious eye damage/eye irritation: By analogy with similar products tested according to the Draize technique this material should produce no corneal or iridial effects and only slight transitory conjunctival effects like those which all granular materials have on conjunctivae.

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Respiratory/skin sensitization:	The product is not expected to be sensitizing.
Mutagenicity:	By analogy with similar products, this product is not expected to be mutagenic.
Carcinogenicity: carcinogenic.	By analogy with similar substances, this substance is not expected to be
Reproductive toxicity: for	By analogy with similar substances, this substance is not expected to be toxic reproduction.
STOT - Single exposure:	No known effects.
STOT - Repeated exposure:	No known effect.
Aspiration hazard:	No hazards resulting from the material as supplied.

SECTION 12: Ecological information

12.1. Toxicity

Information on the product supplied:

Acute toxicity to fish:	LC50/Oncorhynchus mykiss/96 hours > 100 mg/L (Estimated)
Acute toxicity to invertebrates:	EC50/Daphnia magna/48 hours > 100 mg/L (Estimated)
Acute toxicity to algae:	IC50/Algae/72 hours > 100 mg/L (Estimated)
Chronic toxicity to fish:	No data available.
Chronic toxicity to invertebrates:	No data available.
Toxicity to microorganisms:	No data available.
Effects on terrestrial organisms:	No data available.
Sediment toxicity:	No data available.

12.2. Persistence and degradability

Information on the product supplied:

Degradation:	Not readily biodegradable.
Hydrolysis:	Does not hydrolyze.
Photolysis:	No data available.

12.3. Bioaccumulative potential

Information on the product supplied:

The product is not expected to bioaccumulate.

Partition co-efficient (Log Pow): < 0

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Bioconcentration factor (BCF): ~0

12.4. Mobility in soil

Information on the product supplied:

None.

12.5. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products:

Dispose in accordance with local and national regulations. Can be landfilled or incinerated, when in compliance with local regulations.

Contaminated packaging:

Rinse empty containers with water and use the rinse-water to prepare the working solution. If recycling is not practicable, it is disposed of in compliance with local regulations. Can be landfilled or incinerated, when in compliance with local regulations.

Recycling:

In accordance with local and national regulations.

SECTION 14: Transport information

Land transport (DOT)

Not classified.

Sea transport (IMDG)

Not classified.

Air Transport (IATA)

Not classified.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific to the substance or mixture

Information on the product as

supplied: TSCA Chemical

Substances Inventory:

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All components of this product are either listed as active on the inventory or are exempt from listing.

US SARA Reporting Requirements:

SARA (Section 311/312) hazard class:
Not concerned.

SARA Title III Sections:

Section 302 (TPQ) - Reportable Quantity:
Not concerned.

Section 304 - Reportable Quantity:
Not concerned.

Section 313 (De minimis concentration):
Not concerned.

Clean Water Act

Section 311 Hazardous Substances (40 CFR 117.3) - Reportable Quantity:
Not concerned.

Clean Air Act

Section 112(r) Accidental release prevention requirements (40 CFR 68) - Reportable Quantity:
Not concerned.

CERCLA

Hazardous Substances List (40 CFR 302.4) - Reportable Quantity:
Not concerned.

RCRA status:

Not RCRA hazardous.

California Proposition 65 Information:

WARNING! This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm, Acrylamide

SECTION 16: Other information

NFPA and HMIS Ratings:

NFPA:

Health:	0
Flammability:	1

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Instability: 1



HMIS:

Health: 0
Flammability: 1
Physical Hazard: 1
PPE Code: B

This data sheet contains changes from the previous version in section(s):

SECTION 16. Other Information.

Key or legend to abbreviations and acronyms used in the safety data sheet:

Acronyms

STOT = Specific target organ toxicity

Abbreviations

Comb. Dusts 1 = Combustible Dusts Category Code 1

Training advice:

Do not handle until all safety precautions have been read and understood.

This SDS was prepared in accordance with the following:

U.S. Code of Federal Regulations 29 CFR 1910.1200

Version: 2.1

The information provided in this Safety Data Sheet (SDS) 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.