

Safety Data Sheet dated 11/1/2018, Provisional

Printing date: 11/1/2018

1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: IN FORCE P HT

MSDS code: MD0627

Chemical description: Polyamide in mineral oil and glycol ethers blend.

Recommended use of the chemical and restrictions on use

Recommended use:

Industrial uses.

Restrictions on use:

Not known

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Supplier:

Valence Drilling Fluids LLC - P.O. Box 7174, Edmond, OK 73083- U.S.A. PH: 405-285-6454

FAX: 405-285-6434

Emergency phone number

CHEMTREC - Phone n. 800 424-9300



2. HAZARD(S) IDENTIFICATION

Classification of the chemical

Following GHS and within the meaning of 29 CFR 1910.1200 (OSHA)

Warning, Flam. Liq. 4, Combustible liquid.

 Danger, Eye Dam. 1, Causes serious eye damage.

 Warning, Skin Sens. 1B, May cause an allergic skin reaction.

Label elements

Hazard pictograms:



Danger

Hazard statements:

H227 Combustible liquid.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

P370+P378 In case of fire: Use Water mist, Carbon dioxide (CO2), Foam, Chemical Powders to extinguish.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Ingredient(s) with unknown acute toxicity:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

>= 50% - < 70% Polyamide

Index number: Not available, CAS: Trade Secret, EC: Not applicable

 A.4.2/1B Skin Sens. 1B H317

>= 15% - < 30% Distillates (petroleum), hydrotreated light

Index number: 649-422-00-2, CAS: 64742-47-8, EC: 265-149-8

B.6/4 Flam. Liq. 4 H227

 A.10/1 Asp. Tox. 1 H304

>= 5% - < 20% Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]ethanol-

Index number: 603-183-00-0, CAS: 143-22-6, EC: 205-592-6

 A.3/1 Eye Dam. 1 H318

4. FIRST-AID MEASURES

Description of necessary measures

In case of skin contact:

Seek immediately medical advice.

Remove contaminated clothing immediately and dispose of safely.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

None

Indication of immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

In case of fire: Use Water mist, Carbon dioxide (CO₂), Foam, Chemical Powders to extinguish.

Unsuitable extinguishing media:

Do not use water-jets directly on the product.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products:

None

Explosive properties: N.D.

Oxidizing properties: N.D.

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Remove persons to safety.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

Methods and materials for containment and cleaning up

Wash with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not use on extensive surface areas in premises where there are occupants.

Do not use empty container before they have been cleaned.

Before making transfer operations, assure that there are not any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Always keep in a well ventilated place.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

Incompatible materials:

None.

Instructions as regards storage premises:

Cool and adequately ventilated.

Storage temperature:

Store at ambient temperature.

Packaging suggested:

Plastic drums.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Distillates (petroleum), hydrotreated light

DE - TRGS 900 (MAK) - LTE(8h): 140 mg/m³, 20 ppm

Appropriate engineering controls:

None

Individual protection measures

Eye protection:

Use close fitting safety glasses (ANSI Z87.1 or approved equivalent); don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin. Select approved equipment and suitable material

Protection for hands:

Chemical-resistant protective gloves. When prolonged or frequently repeated contact may occur, a glove is recommended to prevent contact.

Respiratory protection:

Use adequate protective respiratory equipment. Select NIOSH/MSHA approved equipment.

Thermal Hazards:

None

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and colour: Liquid, dark amber

Odour: Mild

Odour threshold: N.D.

pH: 7.2 - 8.2 (70/5/25: IPA/Product/Water)

Melting point / freezing point: N.D.

Initial boiling point and boiling range: N.D.

Solid/gas flammability: N.D.

Upper/lower flammability or explosive limits: N.D.

Vapour density: N.D.

Flash point: approx. 61C (141F)

Evaporation rate: N.D.

Vapour pressure: N.D.

Relative density: 0.88 - 0.98

Solubility in water: Insoluble

Solubility in oil: N.D.

Partition coefficient (n-octanol/water): N.D.

Auto-ignition temperature: N.D.

Decomposition temperature: N.D.

Viscosity: >200 cSt at 40C

Miscibility: N.D.

Fat Solubility: N.D.

Conductivity: N.D.

Substance Groups relevant properties N.D.

10. STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions

Chemical stability

Stable under normal conditions

Possibility of hazardous reactions

Stable under normal conditions

Conditions to avoid

Stable under normal conditions.

Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

Strong oxidizers

Hazardous decomposition products

Not known.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological information of the mixture:

a) acute toxicity:

Toxicity Oral Rat LD50 >2000 mg/kg - source: Calculated data.

b) skin corrosion/irritation:

Irritation Skin : Repeated and prolonged contacts may cause slight irritation.

c) serious eye damage/irritation:

Irritation Eye : Causes serious eye damage.

d) respiratory or skin sensitisation:

Sensitization Skin : May cause an allergic skin reaction.

Toxicological information of the main substances found in the mixture:

Polyamide

a) acute toxicity:

OECD 401 Oral Rat LD50 > 2020 mg/kg - source: Literature data.

OECD 402 Skin Rat LD50 > 2000 mg/kg - Duration: 24h - source: Literature data.

b) skin corrosion/irritation:

OECD 404 Skin Rabbit : Not irritant. - Duration: 4h - source: Literature data.

c) serious eye damage/irritation:

OECD 405 Eye Rabbit : Not irritant. - Duration: 24h - source: Literature data.

d) respiratory or skin sensitisation:

OECD 406 Skin Guinea pig : Sensitizing. - source: Literature data.

e) germ cell mutagenicity:

OECD 471 Salmonella typhimurium : Not mutagenic. - source: Literature data.

g) reproductive toxicity:

OECD 422 Oral Rat NOAEL = 1000 mg/kg - source: Literature data.

Distillates (petroleum), hydrotreated light

a) acute toxicity:

Toxicity Oral Rat LD50 > 5000 mg/kg - source: Literature data.

Toxicity Inhalation Rat LC50 > 5.28 mg/l - Duration: 4h - source: Literature data.

Toxicity Skin Rabbit LD50 > 2000 mg/kg - Duration: 24h - source: Literature data.

b) skin corrosion/irritation:

EPA Guideline Skin Rabbit : Irritant. - Duration: 24h - source: Literature data.

c) serious eye damage/irritation:

EPA OTS: 798.4500 Eye Rabbit : Not irritant. - source: Literature data.

d) respiratory or skin sensitisation:

EPA Guideline Skin Guinea pig : Not sensitizing. - source: Literature data.

e) germ cell mutagenicity:

Mutagenesis Rat : Not mutagenic. - source: Literature data.

f) carcinogenicity:

Carcinogenecity Skin Mouse Negative - Duration: > 90 days. - source: Literature data.

g) reproductive toxicity:

Reproductive Toxicity Oral Rat NOAEL > 3000 mg/kg - Duration: 90 days - source: Literature data. - Notes: Related to male.

Reproductive Toxicity Oral Rat NOAEL > 1500 mg/kg - Duration: > 90 days. - source: Literature data. - Notes: Related to female.

Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]ethanol-

a) acute toxicity:

Toxicity Oral Rat LD50 = 5170 mg/kg - source: Literature data.

Toxicity Skin Rabbit LD50 = 3540 mg/kg - source: Literature data.

b) skin corrosion/irritation:

Skin Irritant Rabbit : Not irritant. - source: Literature data.

c) serious eye damage/irritation:

Eye Irritant Rabbit : Irritant. - source: Literature data.

d) respiratory or skin sensitisation:

Guinea pig maximization test Skin Guinea pig : Not sensitizing. - source: By analogy to product with similar composition.

e) germ cell mutagenicity:

OECD 471 Salmonella typhimurium : Not mutagenic. - Duration: 48h - source: Literature data.

g) reproductive toxicity:

Reproductive Toxicity Oral Mouse NOAEL = 720 mg/kg - source: By analogy to product with similar composition.

Substance(s) listed on the NTP report on Carcinogens:

None.

Substance(s) listed on the IARC Monographs:

None.

Substance(s) listed as OSHA Carcinogen(s):

None.

Substance(s) listed as NIOSH Carcinogen(s):

None.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecological information of the mixture:

a) Aquatic acute toxicity:

Data not available.

Ecological information of the main substances found in the mixture:

Polyamide

a) Aquatic acute toxicity:

OECD 203 Fish LC50 > 100 mg/l - Duration h: 96 - Notes: Literature data.

OECD 202 Daphnia magna NOEC = 100 mg/l - Duration h: 48 - Notes: Literature data.

OECD 201 Algae EC50 > 100 mg/l - Duration h: 72 - Notes: Literature data.

c) Bacteria toxicity:

OECD 209 EC50 > 100 mg/l - Duration h: 3 - Notes: Literature data.

Distillates (petroleum), hydrotreated light

a) Aquatic acute toxicity:

OECD 203 Fish LL50 > 2 mg/l - Duration h: 96 - Notes: Literature data.

OECD 202 Daphnia magna EL50 = 1.4 mg/l - Duration h: 48 - Notes: Literature data.

OECD 201 Algae EL50 = 1-3 mg/l - Duration h: 72 - Notes: Literature data.

b) Aquatic chronic toxicity:

Fish NOEL = 0.098 mg/l - Duration h: 672 - Notes: By analogy to product with similar composition.

OECD 211 Daphnia magna EL50 = 0.81 mg/l - Duration h: 504 - Notes: Literature data.

c) Bacteria toxicity:

Bacteria LL50 = 677.9 mg/l - Duration h: 72 - Notes: By analogy to product with similar composition.

Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]ethanol-

a) Aquatic acute toxicity:

Fish NOEC = 1000 mg/l - Duration h: 96 - Notes: Literature data.

Daphnia magna LC50 = 2210 mg/l - Duration h: 48 - Notes: Literature data.

Persistence and degradability

Ecological information of the mixture:

Biodegradability: Data not available.

Ecological information of the main substances found in the mixture:

Polyamide

Biodegradability: Not readily biodegradable. - Test: OECD 301 D - Duration: 28 days : 2.7% - Notes: Literature data.

Distillates (petroleum), hydrotreated light

Biodegradability: Non-readily biodegradable - Test: OECD 301 F - Duration: 28 days : 58.6% - Notes: Literature data.

Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]ethanol-

Biodegradability: Readily biodegradable - Test: OECD 301 D - Duration: 28 days : 85% - Notes: Literature data.

Bioaccumulative potential

Ecological information of the mixture:

Bioaccumulation: Data not available

Ecological information of the main substances found in the mixture:

Polyamide

Bioaccumulation: Not bioaccumulative - Test: Evaluation. - Notes: Literature data (estimated).

Distillates (petroleum), hydrotreated light

Bioaccumulation: Bioaccumulative - Test: BCF - Bioconcentration factor 150-57000 - Notes: Calculated data (in silico).

Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]ethanol-

Bioaccumulation: Not bioaccumulative - Test: BCF - Bioconcentration factor 3 - Notes: Calculated data.

Mobility in soil

Ecological information of the mixture:

Mobility in soil: Data not available.

Polyamide
 Mobility in soil: Data not available.

Distillates (petroleum), hydrotreated light
 Mobility in soil: Very high - Test: Koc: 2.9-4.6 - Notes: Calculated data.

Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]ethanol-
 Mobility in soil: Very high - Test: Koc: 10 - Notes: Calculated data.

Other adverse effects
 None
 Use according to criteria of good industrial practice, avoiding product dispersion in the environment.

13. DISPOSAL CONSIDERATIONS

Waste treatment and disposal methods
 If possible recover the product, otherwise dispose of in authorized landfill or incineration in accordance with local regulation.

14. TRANSPORT INFORMATION

14.1. UN number
 N.A.

14.2. UN proper shipping name
 Proper Shipping Name: N.A.

14.3. Transport hazard class(es)
 US DOT: Not Regulated. This product does not sustain combustion according to 49 CFR 173.120(b)(3).

Road (ADR): Not Regulated
 Air (ICAO/IATA): Not Regulated
 Sea (IMO/IMDG): Not Regulated

14.4. Packing group
 ADR-Packing Group: N.A.
 IATA-Packing group: N.A.
 IMDG-Packing group: N.A.

14.5. Environmental hazards
 N.A.

14.6. Special precautions for user
 N.A.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
 N.A.

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act
 TSCA inventory: all the components are listed on the TSCA inventory.
 TSCA listed substances:
 Polyamide is listed in TSCA Section 8b
 Distillates (petroleum), hydrotreated light - unspecified is listed in TSCA Section 8b
 Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]ethanol- is listed in TSCA Section 8b, Section 8d
 HSDR, Section 8a - PAIR.

SARA - Superfund Amendments and Reauthorization Act
 Section 302 - Extremely Hazardous Substances: no substances listed.
 Section 304 - Hazardous substances: no substances listed.
 Section 313 - Toxic chemical list: Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]ethanol-

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
 No substances listed.

CAA - Clean Air Act
 CAA listed substances:
 Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]ethanol- is listed in CAA Section 112(b) - HAP.

CWA - Clean Water Act

CWA listed substances:

None.

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

None.

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

No substances listed.

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

No substances listed.

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

No substances listed.

Regulatory information USA:

HMIS INFORMATION

HAZARD INDEX: 4 = SEVERE

HEALTH 1

3 = SERIOUS

FLAMMABILITY 2

2 = MODERATE

REACTIVITY 1

1 = SLIGHT

PERSONAL PROT. C

0 = MINIMAL

C: Safety glasses, gloves, chemical apron

*: Chronic effects - See Section 11.

Sara Title III Section 311/312:

Immediate (acute) health effects. / Fire hazard.

State regulations:

Canadian Regulations: All the ingredients as such or as chemical group are registered in DSL.

Canadian WHMIS:

B3 (Combustible liquid)

D2B (toxic material)

16. OTHER INFORMATION

N.A.:Not Applicable

N.D.:No Data available

Full text of phrases referred to in Section 3:

H317 May cause an allergic skin reaction.

H227 Combustible liquid

H304 May be fatal if swallowed and enters airways.

H318 Causes serious eye damage.

Disclaimer:

The product must be stored, handled and used according to criteria of good industrial practice and to regulations in force. This leaflet is offered for your consideration and guidance only. This leaflet complements the Technical Data Sheet but does not replace it. The information herein contained is given to the best of our knowledge at the time of issue.

Due to the several ways in which the product may be used and the possible interaction with variables not depending on or unknown to the supplier, we also cannot accept any liability whatsoever for any loss or damage however arising from the handling and use of our products.

N.A.=Not

Applicable

N.D.=No Data

available

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical

	Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).