

SAFETY DATA SHEET

Fluorosolve Silk

SECTION 1: Product Identification

Product name : Fluorosolve Silk

Chemical family : Fluorocarbon and solvent blend

Common or Trade name : Fiber Protector

Manufacturer : Chem Max Corp

Address : 6479 Norton Center Drive
Norton Shores MI 49441

Phone : 800-858-7237

SECTION 2: Hazards Identification

GHS Classification :

Flammable liquid: Category 3

Aspiration toxicant: Category 1

GHS label elements, including precautionary statements

Pictograms :



Signal word : Danger

Hazard statement (s)

H226 Flammable liquid and vapor.

H304 May be fatal if swallowed and enters airways.

Precautionary statement (s)

P210 Keep away from heat/sparks/open flames/hot surfaces-NO SMOKING.

P233 Keep container closed tightly.

P261 Avoid breathing dust/fume/mist/vapors/spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/eye protection/face protection.

P301 + P310 If swallowed: immediately call a Poison Center or doctor/physician

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

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if possible. Continue rinsing.

P331 Do NOT induce vomiting.

P332 + P313 If skin irritation occurs: Get medical advise/attention.

P370 + P378 In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish.

SECTION 3 : Composition/Information on Ingredients

Name:	CAS#	Weight %
Naphtha (petroleum), hydrotreated heavy	64742-48-9	80%-98%
N-Butyl acetate	123-86-4	1%-10%
Proprietary polymers	Trade secret	1%-10%

* The exact percentage of weight of mixture has been withheld as a trade secret. As per paragraph(1) of 27 CFR 1910, 1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees or designated representatives in accordance with applicable provisions of paragraph(1).

SECTION 4 : First Aid Measures

Eye contact : flush eyes with plenty of water for at least 15 minutes. If irritation occurs, seek medical attention.

Skin contact : Remove contaminated clothing and wash with soap and water. Launder contaminated clothing before reuse.

Inhalation : If inhaled, move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms appear.

Ingestion : Do **not** induce vomiting. Seek immediate medical attention.

NOTE TO PHYSICIAN: If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

SECTION 5 : Firefighting Measures

Suitable extinguishing media : Use water fog, foam, dry chemical or carbon dioxide (CO₂).

Inappropriate extinguishing media : Straight streams of water.

Hazardous combustion products : Oxides of carbon, sulfur and sodium, smoke, fume, traces of HF (hydrogen fluoride) and CFO₂ (carbonofluoride).

Firefighting procedures : As in any fire, wear self-contained breathing apparatus in pressure-demand, MSHA /NIOSH (approved or equivalent), and full protective gear.

Unusual fire and explosion hazards : Containers can build up pressure if exposed to heat and or fire. Use water spray to keep fire exposed containers cool. Containers may explode in the heat of a fire. Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger.

Flammability properties : Flash point 45°C (113°F) Method ASTM D-56 auto ignition temperature 345°C (653°F) Method ASTM E659.

Flammable limits (approximate volume % in air): LEL: 0.7 UEL: 5.4

SECTION 6 : Accidental Release and Disposal Measures

Spills : Provide adequate ventilation. Suitable protective clothing should be worn. Shut off or plug source of spill.

Small spills : Absorb with inert media and collect into suitable container.

Large spills : Dike spill area to contain spillage. Salvage as much reusable liquid as possible into a suitable container. Mop up residual and placed in container for disposal according to local regulations.

SECTION 7 : Storage and Handling

Handling : Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Keep container closed and tightly sealed when not in use. Avoid contact with skin and eyes.

Storage : Keep container tightly sealed in a dry and well ventilated place. Containers once opened must be carefully resealed and kept upright prevent leakage.

SECTION 8 : Exposure Control/Personal Protection

Engineering controls : Provide ventilation and/or other engineering controls to keep the airborne concentrations of vapor and mist below the applicable workplace exposure limits indicated below. The level of protection and types of controls will vary depending on potential exposure conditions.

Exposure limits : OSHA : TWA 400mg/m³ limit .100 PPM.

Personal protective equipment (PPE):

Eyes : Wear appropriate protective glasses or chemical safety goggles as directed by OSHA's eye and face protection regulations in 29 CFR 1910.133

Skin : If prolonged or repeated skin contact is likely, wear appropriate protective gloves.

Clothing : Selection of protective clothing depends on work conditions, potential exposure conditions and may include gloves, boots, suits and other protective items.

Respirators : Where adequate ventilation is not available, an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of OSHA Respiratory Protection Standard 29 CFR 1920.134. In confined areas, use a self-contained breathing apparatus.

Specific hygiene measures: always observe good personal hygiene, such as washing after handling and before eating, drinking and/or smoking. Practice good housekeeping.

SECTION 9 : Physical and Chemical Properties

Appearance :	clear to straw colored.
Physical state :	liquid
Odor :	slight
Odor threshold :	not determined
Relative density (water = 1.0) :	0.82 (At 15.6°C)

SECTION 9 : Physical and Chemical Properties (continued)

Solubility in water :	Negligible
PH :	N/A
Initial boiling point/range :	166°C (331°F) - 176°C (349°F) ASTM
Melting/freezing point :	not determined
Vapor pressure :	Approximately 1.075 kPa (0.56mm Hg) at 29°C
Vapor density (air = 1.0) :	Heavier than air.
Evaporation rate (n-butyl acetate =1):	Approximately 0.18
% Volatiles :	not determined
Partition coefficient (N-Octanol/water):	not determined
Viscosity :	Approximately 1.8 cSt (1.8 mm ² /sec) at 25°C
Flashpoint :	45°C (113°F)
Flashpoint method :	ASTM D-56
Autoignition temperature :	345°C (653°F) ASTM E659
Upper flame limit (volume % in air) :	6.0
Lower flame limit (volume % in air) :	0.7
Decomposition temperature :	not determined
Flammability (solid, gas) :	not determined

SECTION 10 : Stability and Reactivity

Reactivity : not normally reactive

Possibility of hazardous reactions : hazardous polymerization will not occur.

Incompatible materials : strong oxidizers, strong bases and some amines.

Chemical stability : normally stable under normal conditions.

Conditions to avoid : heat, sparks, open flame and other ignition sources.

Hazardous decomposition products : does not decompose at ambient temperatures.

SECTION 11 : Toxicological Information

Hazard Class

Conclusion/Remarks

Inhalation

Acute Toxicity: (Rat) 8 hour(s) LC50 > 5000 mg/m³ (Vapor).

Irritation: No end point data for material.

Minimally toxic. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD guideline 403.

Ingestion

Acute Toxicity (Rat) LD50 > 5000 mg/kg.

Minimally toxic. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD guideline 401.

Skin

Acute Toxicity (Rabbit) LD50 > 5000 mg/kg.

Minimally toxic. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD guideline 402

Skin Corrosion/Irritation: Data available.

Mildly irritation to skin with prolonged exposure. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD guideline 404.

SECTION 11 : Toxicological Information (continued)

Eye

Serious Eye Damage/Irritation: Data available.

May cause mild, short-lasting discomfort to eyes. Based on test data for the material. Test(s) equivalent or similar to OECD guideline 405.

Sensitization

Respiratory Sensitization: No end point data for material.

Not expected to be a respiratory sensitizer.

Skin Sensitization: Data available.

Not expected to be a skin sensitizer. Based on test for the material. Test(s) equivalent or similar to OECD guideline 406.

Aspiration

Data available

May be fatal if swallowed and enters airways. Based on physico-chemical properties of the material.

Germ Cell Mutagenicity

Data available.

Not expected to be a germ cell mutagen. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD guidelines 471, 473, 474, 476, 478, 479.

Carcinogenicity

Data available

Not expected to cause cancer. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD guideline 453.

Reproductive Toxicity

Data available

Not expected to be a reproductive toxicant. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD guideline 414, 421, 422.

Lactation

No end point data for material.

Not expected to cause harm to breast-fed children.

Specific Target Organ Toxicity (STOT)

Single exposure: no end point data for Material.

Repeated Exposure: data available.

Not expected to cause organ damage from a single exposure.

Not expected to cause organ damage from prolonged exposure. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD guidelines 408, 413, 422.

Other Information

For the product itself:

Vapor/aerosol concentrations above the recommend exposure levels are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects including death.

SECTION 11 : Toxicological Information (continued)

Prolonged and/or skin contact with low viscosity materials may defat the skin, resulting in possible irritation and dermatitis.

Small amount of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

The following ingredients are cited on the lists below: None

REGULATORY LISTS SEARCHED

1= NTP CARC.

3= IARC 1

5= IARC 2B

2= NTP SUS

4= IARC 2A

6=OSHA CARC

SECTION 12 : Ecological Information

Ecotoxicity : Not expected to be harmful to aquatic organisms.

Persistence and degradability : This product is readily biodegradable.

Bio accumulative potential : Not expected to be significant.

Mobility in soil : Highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids.

Other adverse affects : No data available

Test	Duration	Organism type	Test results
Aquatic-chronic toxicity	21 days	Daphnia magna	NOELR \geq 1mg/l
Aquatic-acute toxicity	96 hours	Oncorhynchusmkiss	LLO 1000mg/l
Aquatic-acute toxicity	48 hours	Daphnia magna	ELO 1000mg/l
Aquatic-acute toxicity	72 hours	Pseudokirchnreiella Subcapitata	NOELR 1000mg/l

Persistence, degradability and bioaccumulation potential:

Media - Water

Test - Biodegradability

Duration - 28 days

Results - 31.3 % degraded (similar material)

Components:

123-86-4:

Toxicity to fish:

LC50 Pimephales Promelas (Fathead Minnow):18 mg/l

Exposure time: 96 hours

Test type: flow through test

Method: OECD test guideline 203

GLP: no

Toxicity to Daphnia:

EC50 Daphnia Magna (Water Flea): 44 mg/l

Exposure time: 48 hours

SECTION 12 : Ecological Information (continued)

Test type: static test

Toxicity to Algae: EC50 Desmodesmus Subspicatus (Green Algae): 674.7mg/l
End point: Growth rate
Exposure time: 72 hours

Chronic toxicity to Daphnia: NOEC: Daphnia Magna (Water Flea):23 mg/l
Exposure time: 21 days

Toxicity to Bacteria: EC50 Tetrahymena Pyriformis (Ciliate):356 mg/l
Exposure time: 40 hours
Test time: Static

Persistence and degradability:

Components:

123-86-4:

Biodegradability:

Biodegradation: 83%

Exposure time: 28 days

Method: OECD test guideline 301D

Remarks: Readily biodegradable, according to appropriate OECD test.

Chemical oxygen demand (COD): 0.00169 mg/g

BOD/COD: 72%

SECTION 13 : Disposal Considerations

RCRA

Disposal recommendations:

Suitable for burning in an enclosed controlled burner or by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

Other disposal considerations:

Ignitability

Empty container warning:

Do not pressurize, cut, weld, braze, solder, grind, drill, or expose to heat, flame, spark, static electricity or other sources of ignition as they may explode and cause injury or death.

Dispose of in accordance with applicable federal, state and local regulations.

SECTION 14 : Transport Information

DOT : Not DOT regulated for domestic ground transportation.

Proper shipping name: Petroleum distillates, N.O.S.

SECTION 14 : Transport Information (continued)

Hazard class & division: Combustible liquid

ID number: 1268

Packing group: 111

ERG number: 128

Labels: None

Transport document name: UN1268, Petroleum distillates, N.O.S., Combustible liquid, PG 111

***footnote:** The flash point of this material is greater than 100°F. Regulatory classification of this material varies. DOT: Flammable liquid or combustible liquid. OSHA: Combustible liquid. IATO/IMO: Flammable liquid. This material is not regulated under 49 CFR in a container of 119 gallon capacity or less when transported solely by land, as long as the material is not a hazardous waste, a marine pollutant or specifically listed as a hazardous substance.

D.O.T Exempt 49 CFR 173.150

Air (IATA) proper shipping name: Petroleum distillates, N.O.S. Hazard class & division: 3
UN number: 1268
Packing group: 111

Land (TDG) proper shipping name: Petroleum distillates, N.O.S. Hazard class & division: 3
UN number: 1268
Packing group: 111
D.O.T. Exempt 49 CFR 173.150

Sea (IMDG) proper shipping name: Petroleum distillates, N.O.S. Hazard class & division: 3
EMS number: F-E, S-E
UN number: 1268
Packing group 111
Marine pollutant: NO
Label(s): 3

SECTION 15 : Regulatory Information

International inventories

TSCA : complies

DSL/NDSL : complies

EINECS/ELINCS : complies

ENCS : complies

IECSC : complies

KECL : complies

PICCS : complies

AICS : complies

CWA/OPA: This product is classified as an oil under section 311 of the Clean Water Act (40 CFR 110) and the Oil Pollution Act of 1990. Discharge or spills which produce a visible sheen on either surface water, or in water-ways/sewers which lead to surface water, must be reported to the National Response Center at 800-424-8802.

OSHA Hazard Communication Standard: This material is considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910,1200.

Listed or exempt from listing/notification on the following chemical inventories: AICS, DSL, EINCS, IECSC,

SECTION 15 : Regulatory Information (continued)

KECI, PICGS, and TSCA.

EPCRA Section 302: This material contains no extremely hazardous substances.

CERCLA: This material is not subject of any special reporting under the requirements of the comprehensive Environmental Response, Compensations and Liability Act (CERCLA). Contact local authorities to determine if other reporting requirements apply.

SARA: Section 313 title III. of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations Part 372.

California Prop 65: This material does not contain any ingredients subject to Prop 65.

Legend

TSCA - United States Toxic Substances Control Act Section 8 (b) inventory.

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List.

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical aSubstances

ENCS - Japan Existing and New Chemical Substances.

IECSC -China Inventory of Existing Chemical Substances.

KECL - Korean Existing and Evaluated Chemical Substances.

PICCS - Philippines Inventory of Chemicals and Chemical Substances.

AICS - Australian Inventory of Chemical Substances.l

Section 16 : Other Information

Issue date:

Oct, 14, 2022

Section 16 : Other Information (continued)

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End of Safety Data Sheet