

SAFETY DATA SHEET

Section 1. Identification

Product name SterlingCool PlasmaCut
SDS No. 46395
Recommended product use Metalworking fluid

Manufacturer Cutting Fluids Direct
PO BOX 134
Greenbrier, AR 72058

General information telephone 501.358.9292

EMERGENCY TELEPHONE 800.255.3924 (ChemTel Inc.)

Section 2. Hazards identification

OSHA/HCS status Product is hazardous as defined by the OSHA Hazard Communication (29 CFR 1910.1200).

Physical hazards Not classified

Health hazards Eye irritation - Category 2
Skin irritation - Category 2
Skin sensitization - Category 1

GHS label elements



Signal word Warning

Hazard statements Causes serious eye irritation. Causes skin irritation. May cause allergic skin reaction.

Precautionary statements

Prevention Wear eye or face protection. Wear protective gloves and clothing. Wash thoroughly after handling. Contaminated clothing should not be allowed out of the workplace.

Response IF IN EYES: Promptly and cautiously rinse with water for several minutes. If person is wearing contact lenses, remove the contact lenses if easy to do. Continue rinsing. If eye irritation persists, get medical attention.
IF ON SKIN: Wash with plenty of water. Take off any contaminated clothing and wash before reuse. If skin irritation occurs, get medical attention.

Storage Store indoors at room temperature. Keep containers closed.

Disposal Dispose of product and container in accordance with local, state, federal and international regulations.

Hazards not otherwise classified Product spills may result in slippery floors.

Section 3. Composition/information on ingredients

Substance/mixture

Mixture

Ingredient name	CAS Number	%
Triethanolamine	102-71-6	10 - 15
Ethanolamine	141-43-5	1 - 5
n-Butylethanolamine	111-75-1	1 - 5
1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol	4719-04-4	1 - 5
3,5,5-Trimethylhexanoic acid	3302-10-1	1 - 5

Ingredient concentrations are shown as ranges to protect confidentiality. Product does not contain any other ingredients within reportable concentrations that are currently known by the supplier to be health or environmental hazards.

Section 4. First aid measures

Eye contact	Check for and remove contact lenses while flushing eyes immediately with plenty of water for at least 15 minutes. Get prompt medical attention.
Skin contact	Flush skin immediately with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation occurs, get medical attention. Wash clothing and thoroughly clean shoes before reuse.
Inhalation	Remove to fresh air if breathing is difficult and get medical attention. If person inhales smoke and decomposition products in the event of a fire, symptoms may be delayed. Exposed person should be watched for 48 hours and medical attention sought if symptoms occur.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep head low to prevent regurgitation of stomach contents into the lungs. If person is unconscious, do not give anything by mouth. Get medical attention immediately. If person is conscious, rinse out mouth with plenty of water. If person feels sick, get medical attention.
Most important symptoms/effects, acute and delayed	Contact with eyes may cause pain, temporary irritation, watering, redness and blurred vision. Contact with skin may cause temporary irritation, redness, defatting, drying and cracking. See Section 11 for any delayed health effects.
Indication of immediate medical attention and special treatment needed, if necessary	
Note to physician	Treat symptomatically. In case of inhalation of smoke and decomposition products in the event of a fire, symptoms may be delayed and may require medical surveillance of the exposed person for 48 hours.
General information	Provide safety data sheet to attending physician or medical personnel.

Section 5. Fire-fighting measures

Suitable extinguishing media	Use water fog, foam, dry chemical or carbon dioxide extinguisher or spray.
Unsuitable extinguishing media	Not applicable.
Specific hazards arising from the chemical	Extreme heat will pressurize containers and may cause them to burst.
Hazardous combustion products	Combustion products include carbon dioxide, carbon monoxide, and oxides of nitrogen.
Fire fighting instructions	Remove all persons from the vicinity of the fire. Use standard fire-fighting procedures.
Special protective equipment for fire-fighters	Positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Spills should be addressed by properly trained personnel or emergency responders. Keep all other persons from entering the area of the spill. Do not walk through spilled material.
Methods and materials for containment and cleaning up	
For small spills	Wear eye protection and rubber gloves. Wipe up spill with absorbent material such as paper towels or cloth rags. Wipe area thoroughly with wet paper towels or cloth rags to remove any residual contamination. Dispose of spilled material and contaminated absorbents as required by local regulations.
For large spills	Wear chemical goggles and chemical-resistant gloves. Wear a chemical-resistant apron or a chemical-resistant suit and boots such as Dupont's Tyvek® Protective Apparel. Stop any leaks if there is no risk to personal injury. Prevent spilled material from entering drains, sewers, waterways, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material such as sand, earth, vermiculite or diatomaceous earth. Place spilled material and contaminated absorbents in a suitable container for disposal according to local regulations. Contaminated absorbent materials pose the same hazards as the spilled product. Use a licensed waste disposal contractor.
Environmental precautions	Hazardous to the aquatic environment. Avoid discharge of spilled material into drains, sewers, waterways and soil. The relevant authorities must be contacted if the product has leaked into drains, sewers or waterways, or has contaminated the soil.

Section 7. Handling and storage

Precautions for safe handling Wear chemical goggles and chemical resistant gloves. Avoid contact with eyes, skin and clothing. Do not ingest. Use in well-ventilated area. Avoid breathing vapor or mist. Do not eat, drink or smoke while working with material. Wash thoroughly after handling. Empty containers retain residual product that may be hazardous. Do not expose container to flames, sparks or any other ignition source. Wash contaminated clothing and clean shoes before reuse.

Conditions for safe storage including any incompatibilities **Do not add nitrites or any other nitrosating agents to this product.** Store indoors in the original container in a dry, cool and well-ventilated area that is protected from direct sunlight. Store in an area away from food and drink. Protect from freezing. If frozen, thaw completely at room temperature and stir before using. Keep container tightly closed until ready for use. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Occupational exposure limits

Ingredient Name	OSHA		ACGIH	
	PEL	STEL	TWA	STEL
Triethanolamine			5 mg/M ³	
Ethanolamine	6 mg/M ³		3 ppm	6 ppm

Appropriate engineering controls Comply with all applicable exposure limits. Good general ventilation rates appropriate for the conditions should be used. Personal protective equipment should only be considered after engineering control measures such as increased air exchanges, process enclosures, local exhaust, and mist collectors have been put in place to maintain airborne levels below the occupational exposure limits. Personal protective equipment should be selected based on a thorough risk assessment. Ensure that eyewash stations and safety showers are within close proximity of the work area

Individual protection measures

Eye/face protection

Wear chemical goggles. Wear safety glasses with side shields when working with normal use dilutions of the product.

Skin protection

Hands

Wear chemical resistant gloves such as nitrile rubber gloves. For product dilutions, wear protective gloves if prolonged or repeated contact is likely. Gloves should be selected in consultation with the supplier and with a thorough assessment of the working conditions.

Body

A chemical resistant work apron is recommended. Cotton and cotton/polyester work apparel provide little protection against fluid soaking through to the skin. Launder work clothes on a regular basis. For large spills, or in areas where splashing is a risk, a chemical-resistant apron or a chemical-resistant suit such as Dupont's Tyvek® Protective Apparel are recommended. Footwear that will not allow fluid to soak through to the feet is recommended. Ensure that eye wash stations and safety showers are in close proximity to the work area.

Respiratory protection

In case of insufficient ventilation, select and wear suitable respiratory protection equipment after full assessment of the working conditions and in consultation with the supplier/manufacturer of respirators.

Hygiene measures

Do not get in eyes, on skin or on clothing. Do not eat, drink or smoke while using.

Wash hands, forearms and face thoroughly after handling and before eating, drinking, smoking or using the bathroom. Wash work clothes on a regular basis. Keep shoes and protective equipment clean and dry.

Section 9. Physical and chemical properties

Appearance	
Physical state	Liquid
Color	Water-white to yellow
Odor	Mild chemical
Odor threshold	Not available
pH	10.0
Mix pH, 5%	9.5
Density, kg/M³	1036
Density, lbs./gal.	8.65
Solubility	Soluble in water
Viscosity	Not available
Melting point/freezing point	Not available
Initial boiling point, °F	> 212
Flash point	Not applicable
Auto-ignition temperature	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	Not available
Decomposition temperature	Not available
Vapor pressure	Not available
Vapor density	Not available
Partition coefficient(n-octanol/water)	Not available

Section 10. Stability and reactivity

Reactivity	Nonreactive under normal conditions of storage, transport and use.
Chemical stability	Stable under normal conditions
Possibility of hazardous reactions	No known hazardous reactions under normal conditions of storage, transport and use. Hazardous polymerization does not occur.
Conditions to avoid	High temperatures
Incompatible materials	Do not add sodium nitrite or any other nitrosating agents to this product or dilutions of this product due to the potential formation of cancer-causing nitrosamines. Avoid contact with strong acids and oxidizers.

Section 11. Toxicological information

Information on the likely routes of exposure Anticipated routes of entry: dermal, inhalation

Potential acute health effects

Eye contact Causes serious eye irritation.

Skin contact Frequent or prolonged contact causes temporary skin irritation.

Inhalation Prolonged inhalation may be harmful. Exposure to decomposition products in the event of a fire may be hazardous to health with serious delayed effects.

Ingestion Irritating to mouth, throat and stomach. Expected to be a very low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact Symptoms may include irritation, watering, redness and pain.

Skin contact Symptoms may include irritation, cracking, defatting, dryness, and redness.

Inhalation No specific data.

Ingestion No specific data.

Information on product toxicological effects

Acute oral toxicity Not available

Acute dermal toxicity Not available

Acute inhalation toxicity Not available

Information on ingredient toxicological effects Product contains one or more ingredients within reportable concentrations that exhibit(s) some level of acute toxicity.

Ingredient	Dermal, LD50		Inhalation, LC50		Oral, LD50	
	Species	Result	Species	Result	Species	Result
Ethanolamine	Rabbit	1025 mg/kg	Rat	1.3 mg/L	Rat	1515 mg/kg
n-Butylethanolamine					Rat	892 mg/kg
1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol			Rat	0.52-2.08 mg/L	Rat	1520 mg/kg
3,5,5-Trimethylhexanoic acid					Rat	1,160 mg/kg

Skin corrosion/irritation Not corrosive to skin. Frequent or prolonged contact causes temporary skin irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory sensitization Not classified

Skin sensitization May cause allergic skin reaction.

Aspiration hazard Based on chemical and physical properties, not likely to be an aspiration hazard.

Specific Target Organ Toxicity (Single Exposure) Not classified

Specific Target Organ Toxicity (Repeated Exposure) Not classified

Carcinogenicity

Ingredient name	OSHA	IARC	NTP
Triethanolamine	-	3	-

IARC 3 - Not classifiable as a human carcinogen.

Teratogenicity No known significant effects or critical hazards.

Reproductive toxicity No known significant effects or critical hazards.

Mutagenicity No known significant effects or critical hazards.

Section 12. Ecological information

Ecotoxicity No testing has been performed. Product contains one or more ingredients that exhibit(s) some level of toxicity toward one or more organisms.

Ingredient	Species	Method	Results
Ethanolamine	Daphnia magna	Static, 48 hrs., EC50	65 mg/L
	Algae	Static, 72 hrs., EC50	22 mg/L
n-Butylethanolamine	Algae	Static, 72 hrs., EC50	30 mg/L
1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol	Daphnia magna	Static, 48 hrs., EC50	26.1 mg/L
Poly[oxyethylene(dimethylimino)-ethylene(dimethylimino)-ethylene-dichloride]	Daphnia magna	Static, 48 hrs., EC50	0.37 mg/L
	Fathead minnow	Static, 96 hrs., LC50	0.26 mg/L
	Bluegill sunfish	Static, 96 hrs., LC50	0.21 mg/L
	Rainbow trout	Static, 96 hrs., LC50	0.047 mg/L

Persistence and degradability Not available

Bioaccumulative potential Not available

Mobility in soil Product is miscible in water.

Other adverse effects No other adverse environmental effects are known.

Section 13. Disposal considerations

Waste disposal of product	Dispose of at a licensed, waste disposal facility. Do not discharge into waterways or sewer systems without proper authorization.
Container disposal	Do not reuse containers. Empty containers may still contain product residue and should be disposed of at a licensed waste handling facility.

Section 14. Transport information

Land transport (US DOT)	Not regulated
UN Number	
UN proper shipping name	
Hazard class	
Hazard label	
Packaging group	
Sea transport (IMDG)	Not regulated
UN Number	
UN proper shipping name	
Hazard class	
Hazard label	
Packaging group	
Air transport (IATA)	Not regulated
UN Number	
UN proper shipping name	
Hazard class	
Hazard label	
Packaging group	

Section 15. Regulatory information

U.S. Federal Regulations	
TSCA 8b	All of the ingredients in this product are listed or exempted.
SARA 302 Extremely Hazardous Substances	None of the ingredients in this product are listed.
SARA 304 Emergency Release Notification	Not regulated
SARA 311/312 Classification	Immediate (acute) health hazard
SARA 313	This product does not contain any hazardous ingredients at or above regulated thresholds.

**U.S. State Regulations
State Right to Know Regulations**

Ingredient Name	CAS Number	State
Triethanolamine	102-71-6	MA, NJ, PA
Ethanolamine	141-43-5	MA, NJ, PA

Section 16. Other information

History

Issue date 12 Feb 2018
Version number 1

VOC ASTM D2369 = 12.4% (128 g/L).

California Proposition 65

Warning: This product contains a chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

Disclaimer

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