



Technol[®] B100

Biodiesel Cold Flow Improver

Product Description Sheet

Technol B100 Biodiesel Cold Flow

Improver is a specifically engineered and unique Biodiesel Pour Point Depressant designed for Soy feedstock. During cold temperatures, unconditioned Biodiesel forms large, cohesive, fatty particles that gel into a solid mass. This impervious mass of gelled fat clogs fuel pick ups and lines, stopping fuel flow.

Technol B100 Biodiesel Cold Flow

Improver depresses the Pour Point and improves ignition properties by modifying the size and shape of these fatty particles in suspension, preventing an impervious mass of gelled fuel.

Technol B100 Biodiesel Cold Flow

Improver is not a hydrocarbon diesel fuel additive used at high concentrations that performs poorly in Biodiesel fuel. Independent tests on (SME) Biodiesel has shown a pour point reduction of 30°F @ the ratio of 1:750. Biodiesel cold temperature gelling properties differ greatly from feedstock to feedstock. You can expect differing amounts of Pour Point benefit depending upon your choice of feedstock.

Technol B100 Biodiesel Cold Flow

Improver can be used to condition B100 for home heating, and is registered with the EPA for on-road use.

Application Ratio 1:750

DO NOT OVERDOSE!

Applying more or less than the required application will yield less than desired results.

Initial Application

Apply 1 gallon to 375 gallons of B100

Maintenance Application

Apply 8ozs. to 45 gallons of fuel.

Apply 32ozs. to 180 gallons of fuel.

Apply 1 gallon to 750 gallons of B100.

For Best Results:

Apply directly into bulk storage, saddle or fuel tanks before the onset of cold temperatures, then refuel to ensure proper mixing and distribution.

Technol B100 BCFI is available in:

32oz. bottles packed 12 per case

Limited quantity available!

Order your supply today!



B100 Biodiesel Anti-Gel Pour Point Depressant

Features & Benefits

- Application Ratio 1:750
- Specifically formulated for Biodiesel to improve the Pour Point capabilities of B100
- Large, cohesive, fatty, solid particles that stop fuel flow prevented from forming to maintain fuel flow
- Permits the smooth-flowing of B100 during cold climate conditions
- Reduces or eliminates fuel line clogging
- Safe for vehicle and home heating B100 Pour Point conditioning
- Registered with the EPA

*Used by Home Owners ▲ Vehicle Owners ▲ B100 Supply Companies
EPA Approval #1642-0009 for both on-road and off-road use*



Technol[®] B100

Biodiesel Cold Flow Improver

Technical Data Sheet

DESCRIPTION

Technol B100 BCFI is a unique Pour Point Depressant designed specifically for (SME) B100 Biodiesel to maximize Pour Point performance. This product Improves B100's cold climate pour point operability limits.

Technol B100 Cold Flow Improver improves B100 flow ability and ignition properties by preventing the formation of large cohesive fatty solid particles and modifying the properties of these solids in suspension.

PRODUCT BENEFITS

Technol B100 Cold Flow Improver:

- Lowers SME Pour Point up to 30°F
- Permits smooth-flowing fuel under severe cold climate conditions.

PHYSICAL & CHEMICAL PROPERTIES

FLASH POINT: 135°F COC
APPEARANCE: Thin amber liquid
SPEC. GRAVITY: 0.90 (Typical)
PRECAUTIONS: Combustible

HANDLING

Technol B100 Cold Flow Improver is recommended to be applied directly into bulk storage, saddle, or fuel tanks, before the onset of cold temperatures in order to provide proper protection against Pour Point problems. Normal precautions in the handling of industrial chemicals and petroleum distillates of low toxicity should be exercised when using this product. Skin and eye contact should be avoided and use only in a well-ventilated area. For full details on this category, please refer to the **Safety Data Sheets**. Keep this and all other chemical products away from children and animals.

Please review the Safety Data Sheets for this product before handling.

Application

Technol B100 Cold Flow Improver is typically applied at 1:750. In severe cold climates, a double-dose (1:375) is recommended.



B100 Biodiesel Cold Flow Improver

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Rules & Regulations
Revision: 09/06/2015 Issued: 10/01/2005 Supersedes: 03/01/2006

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT FORM: Liquid Substance
TRADE NAME: **Technol B100 Biodiesel Cold Flow Improver**
CHEMICAL NAME: Proprietary mixture of petroleum distillates
COMPANY: Technol Fuel Conditioners, Inc.
145 Wyckoff Road
Eatontown, NJ 07724
Phone: 1.800.645.4033
EPA REGISTRATION: #1642-0009 - Approved for On-Road and Off-Road Fuel Consumption
EMERGENCY PHONE: Chemtrec: 1.800.424.9300 - within USA and Canada
Chemtrec: 1.703.527.3887 - outside USA and Canada

SECTION 2. HAZARDS IDENTIFICATION

GHS SIGNAL WORD: **WARNING!**

GHS HAZARD PICTOGRAMS:



IRRITANT



COMBUSTIBLE



HEALTH



ENVIRONMENT

GHS CLASSIFICATIONS:

PHYSICAL: H227: Combustible liquid
HEALTH: H302: Harmful if swallowed
H312: Harmful in contact with skin
H320: Can cause eye irritation
H336: May cause drowsiness or dizziness
H373: May cause damage to organs through prolonged or repeated exposure
ENVIRONMENTAL: H402: Harmful to aquatic life

GHS PRECAUTIONARY STATEMENTS:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233: Keep container tightly closed.
P261: Avoid breathing dust/fumes/gas/mist/vapors/spray [As modified by IV ATP].
P262: Do not get in eyes, on skin, or on clothing.
P273: Avoid release into the environment.
P301+P331: IF SWALLOWED, Do NOT induce vomiting.
P410+P411: Protect from sunlight. Store at temperatures between 45°F [7.2°C] and 85°F [29.4°C].

SECTION 3. COMPOSITION AND INGREDIENTS INFORMATION

Chemical Name	Hazard Data	% By Weight	CAS Number	SARA 311	SARA 312	SARA 313
Aromatic Naphtha	Not Available	18% - 32%	64742-94-5	No	No	No
Pseudocumene	Not Available	1% - 3%	95-63-6	No	No	Yes



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Revision: 09/24/2015 Issued: 10/01/2005 Supersedes: 03/01/2006

SECTION 4. FIRST AID MEASURES

INHALATION: Overexposure can cause dizziness, lack of coordination, and breathing complications, unlikely to occur under normal usage conditions. Handlers should always wear a self-contained breathing apparatus in the positive mode with a full face-piece due to the likelihood of fumes, smoke, and hazardous component decomposition. Remove to fresh air and deploy artificial respiration if not breathing. Get medical attention.

SKIN CONTACT: Can cause irritation of exposed skin due to defatting of skin tissue. Handlers should always wear rubber gloves. Wash exposed skin vigorously with general soap and water. Get medical attention if skin irritation persists.

EYE CONTACT: Can cause irritation of exposed eye tissue. Handlers should always wear splash-proof goggles. Rinse eyes with cool flowing water for at least 15 minutes and get immediate medical attention.

INGESTION: Can cause irritation of the gastrointestinal tract and possible fatal kidney liver damage. DO NOT INDUCE VOMITING. Deploy artificial respiration if not breathing. Get immediate medical attention.

SECTION 5. FIREFIGHTING MEASURES

Special Hazards and Procedures:

This product poses no unusual fire fighting problems. It will burn if involved in a fire. Oxides of sulfur (SO₂) will be given off while burning. Combustion may produce oxides of carbon and oxides of calcium. Water may be used to cool fire-exposed containers and structures but is not a suitable extinguishing media.

Protective Equipment:

As in any fire, firefighters must be equipped to prevent breathing of vapors or products of combustion. Wear an approved self-contained goggled breathing apparatus, protective gloves and clothing.

Extinguishing Media:

Dry chemical, CO₂ and foam are suitable. Water jets or any water-based fluid are not suitable. Closed containers may be cooled with water. Treat large fires as an oil fire. Oil will float on water and can cause fire to spread. Heat from fire can generate flammable vapor.

SECTION 6. ACCIDENTAL RELEASE PRECAUTIONS

PERSONAL: Wearing suitable protective equipment, eliminate sources of ignition and open nearby windows to ventilate the problem area.

ENVIRONMENTAL: Product has very low solubility in water. Prevent from entering sewer system, surface water or soil.

FOR SPILL CLEAN-UP: Shut off leak and dike up large spills. Absorb with an inert material such as sand, soil or vermiculite. Sweep

SECTION 7. PRODUCT HANDLING & STORAGE

HANDLING: This product is best stored in its original container. Steel or HDPE containers are recommended replacements and electrically bond and ground all containers and equipment. Avoid contact with eyes, skin and clothing. Avoid breathing vapors, aerosol and mists. Use with adequate ventilation and wash thoroughly after handling. Never use pressure to empty drums.

STORAGE: Full or partially-filled containers should always be kept upright and away from strong oxidizing agents. This product will pump down to 10°F [-12.2°C]. Nonetheless, it is recommended that full or partially-filled containers be stored in a cool dry place between 45° - 85°F [7.2° - 29.4°C]. Store in original container if possible, and keep all chemical containers away from direct sunlight and tightly closed when not in use.



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SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION

VENTILATION: None normally required. Use additional ventilation if needed to control vapor concentrations particularly if a mist is generated or fumes from hot material are present.

RESPIRATORY: None required if area adequately ventilated. Use appropriate respiratory protection if used in confined areas. If used in an application where a mist may be generated, observe a TWA/PEL of 5 mg/m³ (OSHA, ACGIH) for a mineral oil mist. Use a respirator with dual organic vapor/mist and particulates cartridge if vapor concentration exceeds permissible exposure limit.

SKIN PROTECTION: Use neoprene-type gloves and apron.

EYE PROTECTION: Wear chemical safety goggles or a full-plate face shield. Contact lenses should not be worn.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Amber Liquid	Odor:	Solvent Characteristic
Boiling Point:	> 350°F	Density at 25°C (gm/cm ³):	0.90 Typical
Vapor Pressure:	< 1 @ 20°C (mm Hg)	Vapor density (Air = 1):	< 5.2 (Estimated)
Solubility in Water:	Negligible	Solubility in Organic Solvents:	Soluble
pH:	Not Applicable	Flash point, COC (ASTM D-93):	135°F [57.2°C]
Pounds per Gallon:	7.5	Evaporation Rate:	< 1 (Butyl Acetate =1)
Freeze Point:	10°F (-12.2°C)	Volatiles By Volume @ 68°F [20°C]:	40%

SECTION 10. STABILITY AND REACTIVITY

This product is stable and not subject to hazardous polymerization.

Hazardous Decomposition Products: Oxides of carbon (carbon monoxide and carbon dioxide), oxides of hydrogen (contaminated and hazardous water), and oxides of Nitrogen can occur when exposed to heat at 350°F (176.7°C).

Incompatible materials: Strong oxidizers such as hydrogen peroxide, oxidizing chlorine, and bromine compounds (e.g. chlorine bleach) and chromic acid should be avoided.

Conditions to avoid: Extreme heat and sources of fire or ignition.

SECTION 11. TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE: Eye contact, skin contact, inhalation of vapors, and ingestion.

ACUTE TOXICITY: The handling procedures and safety precautions in this SDS should be followed to minimize employee exposure.

CHRONIC EFFECTS: Can cause eye, skin and gastrointestinal irritation. Irritation of tissue, defatting of skin, gastrointestinal irritation, Kidney and Liver damage.

SYMPTOMS: Irritation of exposed tissue and organs, blurriness of vision, dizziness, fainting, and lack of physical coordination.

LD50: Not Established.

NTP/IARC/OSHA: This product and none of its components are listed as a carcinogens, mutagens, or teratogens.

SECTION 12. ECOLOGICAL INFORMATION

No specific aquatic data is available. This product should be kept away from all bodies of water, and prevented from entering sewer streams. It may be necessary to extract soil where large spills have occurred. No specific Bioaccumulation data is available. No specific Terrain Migration data is available.



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SECTION 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: This product should be incinerated as a waste oil, at a certified and registered waste disposal site, in compliance with all federal, state and local regulations and requirements.

RCRA STATUS OF UNUSED PRODUCT: Dispose of this product in permitted hazardous wastes sites. Keep this product away lakes, streams, rivers, ponds, sewer systems, and any other body of water.

SECTION 14. TRANSPORTATION INFORMATION

US DOT Classification:



NA 1993, Combustible Liquid, NOS (placard required on ground carriers): not regulated if shipped or transported in containers less than 450 liters (119 Gallons US).

Proper Shipping Name: Proprietary mixture of petroleum derivatives
Shipping Class: 65 (regardless of package or container size)
Packing Group: III (regardless of package or container size)
NMFC Rating: 155250-02



UN 1993, Flammable Liquid, NOS (placard required on ground carriers): If shipped in containers of 450 liters or more (120 Gallons US or more), by air or by sea.

Proper Shipping Name: Petroleum Distillates, NOS
Shipping Class: 65 (regardless of package or container size)
Packing Group: III (regardless of package or container size)

IMDG Classification:

This product is not known to be a marine pollutant according to the International Marine Dangerous Goods Codes, however it can cause harm to aquatic life.

ICAO Classification:

Proper Shipping Name: Petroleum Distillates, NOS
Class: 3
UN/NA ID #: NA 1993
Packing Group III

IBC Classification:

Guidance on transporting this product in bulk by ocean freight can be obtained from Annex II of Marpol 73/78 and the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.

All Transportation Methods:

Keep packages and containers upright and tightly sealed at all time during transportation. Do not expose packages and containers to direct sunlight, extreme heat, or any source of ignition. All product should be transported in their original packaging and containers. Rubber, plastic or other lined containers should not be used.

SECTION 15. REGULATORY INFORMATION

There are no other national and/or regional statutes or information on this product, including OSHA, Department of Transportation, Environmental Protection Agency, Consumer Product Safety Commission, and Right-To-Know Act not previously addressed in this document.

Chemical Name _____ CAS # _____ NJ TS Number _____

None



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SECTION 16. OTHER INFORMATION

This product has not been tested in long term, chronic exposure, therefore, the handling procedures and safety precautions in the SDS should be followed to minimize employee exposure.

Label Information for the United States: CAUTION: May cause skin and eye irritation. Do not swallow. Avoid eye and skin contact. Wash thoroughly after handling. Avoid contact with clothing. Wash clothing before reuse. Keep out of reach of children. Keep containers tightly closed when not in use. Avoid breathing mists or sprays of this product or its solutions.

EMPLOYER RESPONSIBILITY

Employers must ensure that these Material Safety Data Sheets are readily accessible and available to all their employees responsible for the storage, handling, and manipulation of this product. This can be done in many ways, such as organizing all chemicals SDS in freely available binders kept in areas where the chemicals are stored, or on computers the handling employees have access to without the inconvenience of leaving the work or storage area. We strongly recommend the binder method which keeps them available in the event of a power outage or other emergency inhibiting computer use. Employers may want to consider designating two persons (primary and backup) responsible for obtaining and maintaining SDS records. If the employer does not have a particular SDS for a chemical commodity, the employer or responsible designate should contact the chemical manufacturer to obtain one prior to product use.

REFERENCES

OSHA, 29 CFR 1910.1200(g) and Appendix D.

United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), 3rd Revised Edition, United Nations, 2009. These references and other information related to the revised Hazard Communication Standard can be found on OSHA's Hazard Communication Safety and Health Topics web site at: <http://www.osha.gov/dsg/hazcom/index.html>.

DISCLAIMER

This brief provides a general overview of the Material Safety Data Sheet requirements as mandated by the Hazard Communication Standard 29 CFR 1910.1200(g) and Appendix D of 29 CFR 1910.1200. It does not alter or determine compliance responsibilities in the standard or the Occupational Safety and Health Act of 1970. Since interpretations and enforcement policy may change over time, the reader should consult current OSHA interpretations, decisions by the Occupational Safety and Health Review Commission, and the courts for additional guidance on OSHA compliance requirement. Please note that states with OSHA-approved state plans may have additional requirements for chemical safety data sheets, outside of those outlined above. For more information on those standards, please visit: <http://www.osha.gov/dcsp/osp/statestandards.html>.

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B100 Biodiesel Cold Flow Improver Application Chart

This chart indicates the availability of container sizes and specifies the ounces or gallons of product needed for the amount of fuel to be conditioned. Container quantities have been maximized in accordance with skid dimensions. Please see the *Packaging & Shipping* notation at the bottom. We recommend the "Initial" dose amounts for first-time applications.

Container oz:	8oz. = 8	Quart = 32	Gal. = 128	Pail = 640	Drum = 6,912	Tote = 35,200
Available/Skid Max:		YES 480				
Application Dose:		Initial	Maintain			
Gallon Ratio: 1:		375	750			

		Oz/Qt to Apply				
	50	18oz	9oz			
G	100	35oz	18oz			
A	200	69oz	35oz			
L	500	6qt	3qt			
L	1,000	11qt	6qt			
O	2,000	22qt	11qt			
N	3,000	32qt	16qt			
S	4,000	43qt	22qt			
	5,000	54qt	27qt			
O	7,500	80qt	40qt			
F	8,000	86qt	43qt			
	9,000	96qt	48qt			
F	10,000	107qt	54qt			
U	12,000	128qt	64qt			
E	14,000	150qt	75qt			
L	15,000	160qt	80qt			
	20,000	214qt	107qt			
T	25,000	267qt	134qt			
O	45,000	480qt	240qt			
	50,000	→	267qt			
B	75,000	→	400qt			
E	80,000	→	427qt			
	90,000	→	→			
C	95,000	→	→			
O	100,000	→	→			
N	110,000	→	→			
D	115,000	→	→			
I	119,900	→	→			
T	135,000	→	→			
I	159,500	→	→			
O	200,000	→	→			
N	240,000	→	→			
E	320,000	→	→			
D	350,000	→	→			
	400,000	→	→			

Packaging & Shipping : 12 8oz bottles/case (where available) 60 cases per skid; 12 quart bottles/case (where available) 40 cases per skid, 4 gallons/case (where available) 40 cases per skid, 20 pails/skid, 4 drums/skid, one 275-gallon HDPE tote bin per skid (where available). All small packaged items are induction-sealed. Pails and drums are steel with closed heads. All containers and skids are non-returnable. Please recycle in accordance with local statutes. When seeing an arrow, following the direction for the recommended next larger or smaller container size.