



# Safety Data Sheet

Prepared according to Globally Harmonized System (GHS) & 29 CFR 1910.1200.  
United States.

## SECTION 1: IDENTIFICATION

**Product Name (Identifier):** Smoke-Free SF-10™  
**Intended Use(s) / Restrictions:** Engine oil additive for reducing excessive exhaust smoke.  
**SDS No.:** MP-004  
**Revision Date:** 15 July 2014  
**Manufacturer:** Muscle Products Corp.  
752 Kilgore Road  
Jackson Center, PA 16133 U.S.A.  
www.mpclubricants.com  
**Company Phone:** 1-800-227-7049 U.S. & Canada  
1-814-786-0166 International  
**Emergency Telephone (24 hr):** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## SECTION 2: HAZARDS(S) IDENTIFICATION

**Classification** Acute toxicity, Inhalation - Category 4  
Skin sensitization - Category 1A

### Label Elements

#### Symbols:



**Signal Word:** Warning.

**Hazard Statement(s):** Harmful if inhaled.  
May cause an allergic skin reaction.

**Other Hazards (HNOC):** Contact with hot product will cause thermal burns.  
Prolonged or repeated contact as from clothing wet with material may cause dermatitis.  
Repeated inhalation at high levels may produce liver or kidney damage.

**Precautionary Statement(s):** Avoid breathing fume / mist / vapors / spray. Use only outdoors or in a well-ventilated area.  
Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves (chemical resistant, i.e. nitrile).

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical attention.

**Disposal:** Dispose of product and/or container to a licensed waste disposal contractor in accordance with local, regional, national and international regulations.

### HMIS III ratings (U.S.)

Health: 2 Flammability: 1 Physical hazards: 0 Personal protection: *None assigned* - PPE codes should be determined by the employer, who is familiar with the actual conditions under which the material is used. See Section 8 for more information.

See Section 11 for complete health hazard information

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS No	% by Weight*
Polybutene	9003-29-6	80 - 89 %
Petroleum hydrocarbon lubricant additive	Confidential mixture*	5 - 14 %
Severely hydrotreated mineral oils that may be described as one or	64742-54-7; 64742-65-0;	< 5 %

more of the CAS numbers listed	65742-56-9; 64742-52-5	
Zinc diamylthiocarbamate	15337-18-5	< 1 %

\* If Chemical Name/CAS No is "proprietary" or "confidential" and/or % by Weight is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

#### SECTION 4: FIRST AID MEASURES

##### Inhalation:

Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

##### Skin contact:

**HOT MATERIAL:** Immediately flush skin with cool water for at least 15 minutes. Get immediate medical attention.

**COLD MATERIAL:** Clean exposed skin with waterless hand cleaner. Take off contaminated clothing and shoes and wash before reuse. Thoroughly wash contaminated area of the body with soap and water. If skin irritation or rash occurs: Get medical attention. Contaminated work clothing should not be allowed out of the workplace.

##### Eye Contact:

**HOT MATERIAL:** Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention for mechanical removal of material from the eye. The use of flush fluid, other than water, is not recommended.

**COLD MATERIAL:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for 15 minutes or until chemical is removed. If eye irritation persists: Get medical attention.

##### Ingestion:

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If conscious and alert, have victim rinse mouth thoroughly with water. Get medical attention if symptoms occur. If large quantities are swallowed, wash out mouth and get immediate medical attention.

##### Most important symptoms/effects (acute and delayed):

HOT material can cause thermal burns.

Inhalation of vapors, mists or fumes caused by elevated temperatures or mechanical action may irritate eyes, nose, throat and lungs. Inhalation of high concentrations may cause headaches, dizziness, nausea, drowsiness or stupor.

Skin contact may cause an allergic reaction. Prolonged or repeated contact with skin may cause defatting of the skin which can lead to irritation and/or dermatitis. Symptoms may include redness, edema, drying and cracking of the skin.

Swallowing may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

##### Indication of immediate medical attention or special treatment, if necessary:

If exposed or concerned: Get medical attention.

##### ADVICE TO PHYSICIANS:

In case of thermal burns from skin contact with HOT material: Medical personnel may leave the material in place to minimize physical damage to the skin. Medical personnel may cover the material with a burn gel to prevent the adhesion of the dressing to the material.

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Treat symptomatically and supportively.

##### Additional advice / information:

None known.

#### SECTION 5: FIRE-FIGHTING MEASURES

##### Suitable extinguishing media:

Use water fog, foam, dry chemicals or carbon dioxide. Water may not be effective to extinguish fire.

Do NOT use a solid water stream as it may scatter and spread fire.

##### Hazardous combustion products:

Carbon oxides, hydrogen chloride nitrogen oxides, sulfur oxides, metal oxides, toxic gases and irritating fumes and vapors.

##### Protection for firefighters:

As with any fire, firefighting personnel should wear full protective gear and self-contained breathing apparatus (SCBA) in positive pressure mode. Do not fight fire when it reaches the material. Withdraw from area and allow fire to burn. Cool adjacent structures and containers with water spray to protect and prevent ignition. Contaminated water run-off can cause environmental damage and might burn if involved in a fire. Dike and collect water used to fight the fire. Do not release chemically contaminated water into drains, soil or surface water.

**Additional advice / information:**

Take no action involving personal risk or without suitable training.

**NFPA hazard identification (U.S.):**

Health: 2      Flammability: 1      Instability: 0      Special hazards: -----

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment & emergency procedures:**

Evacuate unnecessary personnel to safe area. Stop leak if without risk. Eliminate ignition sources if safe to do so. Avoid contact with skin, eyes and clothing - do not touch or walk through spilled material. Wear protective clothing / equipment (see Section 8). Ventilate area before entering if spilled in a confined space or other poorly ventilated area. Keep out of low areas.

**Environmental precautions:**

Prevent from entering soil, ditches, sewers, waterways and/or groundwater.

**Methods and materials for containment and clean-up:**

Contain spilled material. Absorb spill with inert material (i.e. dry sand or earth). Sweep, scoop, or vacuum the discharged material. Seal absorbent material in a closed labeled container for disposal.

LARGE SPILLS: Stop material flow if without risk. Dike area far ahead of spill for later disposal. Use a non-combustible material (i.e. vermiculite, sand or earth) to soak up the product. Place into a container for later disposal.

**Additional advice / information:**

NAERG 2012: 171

See Section 13 for disposal considerations.

**SECTION 7: HANDLING AND STORAGE**

**Precautions for safe handling:**

Avoid breathing mist, vapors, or spray. Use only outdoors or in a well-ventilated area. Use adequate ventilation and/or engineering controls (see Section 8) in high-temperature processing to prevent exposure to vapors. Avoid eye and skin contact. Wear protective gloves (see Section 8). Wash face, hands and exposed skin thoroughly after handling and before eating, drinking or smoking. Keep away from ignition sources. Do not ingest product. Launder contaminated clothing and shoes before reuse. Contaminated work clothing should not be allowed out of the workplace. Keep containers closed and upright when not in use. Do not allow spillages to enter drains, sewers or waterways.

**Conditions for safe storage, including incompatibilities:**

Keep container tightly closed and sealed until ready for use. Store protected from sunlight in a cool, dry and well-ventilated place. Store away from incompatible materials (see Section 10). Pressure in sealed containers can increase under the influence of heat. Keep away from ignition sources. Take precautions to avoid release to the environment. Do NOT store in unlabeled or mislabeled containers. Maximum storage temperature for product preservation: 40°C (104°F). Storage life - 2 years if stored according to advice given.

**Additional advice / information:**

Empty containers contain material residue. Do NOT cut, weld, braze, solder, drill, grind or expose containers to heat, flame, spark or other sources of ignition. Do not remove labels unless container is thoroughly cleaned.

**SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Occupational exposure limits:**

Ingredient name	OSHA PEL	ACGIH TLV	Other
Severely hydrotreated mineral oils:	TWA: 5 mg/m3	TWA: 5 mg/m3	NIOSH TLV 5 mg/m3 (TWA) NIOSH STEL 10 mg/m3
Oil mist, if generated		STEL: 10 mg/m3	

(s) = skin      (c) = ceiling exposure

**Engineering controls:**

General ventilation is normally adequate. Use exhaust ventilation to keep airborne concentrations below exposure limits. Thermal processing operations should be ventilated to prevent exposure to vapors.

**Personal protective equipment**

**Eye / face protection:**

Safety glasses with side shields. If potential for splash or mist exists, wear chemical splash goggles or faceshield. If product is handled HOT, goggles, face shield or other full-face protection should be worn.

**Skin / body protection:**

Use nitrile or neoprene gloves. Long sleeve shirt recommended. Wear apron or coverall if there is a risk of exposure to splashes. When handling HOT material, wear heat resistant protective gloves, clothing, and face shield that are able to withstand the temperature of heated product. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction.

**Respiratory protection:**

Not usually needed under normal conditions of use. If product is heated or misted, use respirator with a combination organic vapor and high efficiency filter cartridge if recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.

**Work and hygiene practices:**

Safety showers and eye wash stations should be provided close to work areas with splash hazards. Launder contaminated clothing and shoes before reuse. Follow general hygiene considerations recognized as common good work practices. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using product.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Cloudy pale yellow liquid
<b>Odor:</b>	Slight
<b>Odor threshold:</b>	Not determined
<b>pH:</b>	Not determined
<b>Melting / freezing point:</b>	~ - 12° to 2°C (10° to 35°C)
<b>Initial boiling point / range:</b>	~ 200°C (392°F)
<b>Flash point:</b>	133°C (271°F) D-93
<b>Evaporation rate:</b>	Not determined
<b>Flammability / Explosive Limits:</b>	
<b>Upper:</b> Not determined	<b>Lower:</b> Not determined
<b>Vapor pressure:</b>	Negligible
<b>Vapor density:</b>	Not determined
<b>Specific gravity:</b>	0.9240 D-4052
<b>Relative density:</b>	0.9231 g/ml @ 60°F D-4052
<b>Solubility(ies):</b>	Insoluble (water)
<b>Partition coefficient: n-Octanol/water</b>	Not determined
<b>Auto-ignition temperature:</b>	Not determined
<b>Decomposition temperature:</b>	Not determined. Product may decompose below its boiling point.
<b>Viscosity:</b>	3728 cSt @ 40°C / 151 cSt @ 100°C D-445 Viscosity Index: 127 D-2270

*The above properties are typical values and do NOT constitute a product specification.*

**SECTION 10: STABILITY AND REACTIVITY****Stability / Reactivity:**

Stable under normal handling and storage conditions.

**Possibility of hazardous reactions:**

None known under normal conditions of storage and use. May depolymerize at temperatures above 200°C (392°F) with the production of extremely flammable butene monomers.

As with all petroleum chemicals, product tends to soften or swell most natural rubbers.

**Conditions to avoid:**

Direct sunlight, high temperatures, and sources of ignition. Strong oxidizing conditions.

**Incompatible materials:**

Strong oxidizing agents. Strong bases. Acidic clays at > 100°C (212°F). Acids. Reducing agents. Can react with alkali metals and alkaline earth metals, iron, zinc and aluminum at high temperatures leading to product decomposition.

**Hazardous decomposition products:**

Smoke, irritating vapors, carbon monoxide, carbon dioxide, hydrogen chloride, aldehydes and other products of incomplete combustion. Hydrogen sulfide and alkyl mercaptans may also be released. Under combustion conditions, oxides of phosphorus, sulfur, and zinc will form. During a fire, rapid depolymerization may produce flammable vapors.

**SECTION 11: TOXICOLOGICAL INFORMATION****Information on toxicological effects**

Likely routes of exposure:

Skin contact, eye contact, inhalation.

**Acute exposure**

Oral toxicity:

No data on product. LD50 rats > 29,000 mg/kg based on component data. Symptoms may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Dermal toxicity:

No data on product. Unlikely to be hazardous by skin absorption. LD50 rabbits > 8400 mg/kg based on component data.

Inhalation toxicity:

Harmful if inhaled. No data on product. LC50 > 17.3 mg/L based on component data. Elevated temperatures or mechanical action may form vapors, mist or fumes which may irritate eyes, nose, throat and lungs.

Skin corrosion / irritation:

Unlikely to cause skin irritation. Based on component data.

Eye damage / irritation:

May cause slight eye irritation. Based on component data.

Sensitization – skin / respiratory:

May cause skin sensitization. No data available to indicate product may be a respiratory sensitizer. Based on component data.

**Chronic exposure**

Germ cell mutagenicity:

No data available to indicate product or its components present at 0.1% or greater are mutagenic.

Carcinogenicity:

Severely hydrotreated naphthenic petroleum oils have not been found to be carcinogenic or potential carcinogens. The oils in this product contain < 3.0% DMSO extractable compounds by IP 346.

Reproductive toxicity:

No data available to indicate product or its components present at 0.1% or greater are reproductive toxins.

**Specific target organ toxicity (STOT)**

Single exposure:

None known.

Repeated exposure:

No data on product. Repeated or prolonged skin contact may cause defatting of the skin, which can lead to irritation and/or dermatitis. Repeated inhalation at high levels may product liver or kidney damage. Based on component data.

**Aspiration hazard**

Not determined.

**SECTION 12: ECOLOGICAL INFORMATION****Ecotoxicity:**

No data on product. Unlikely to have any ecotoxic effect under normal conditions of use. Ecological impacts may have potential to occur if released to water and sediment. Based on component data.

**Persistence / degradability:**

No data on product. Not expected to be biodegradable. Based on component data.

**Bioaccumulative potential:**

No data on product. More than 80% of components are not bioaccumulating.

**Mobility in soil:**

No data on product. Not likely to move rapidly with surface or groundwater flows because of its low water solubility. Based on component data.

**Ozone depletion:**

Ozone depletion: No known ingredients present at 0.1% or greater are identified as ozone-depleting substances.

**Other adverse effects:**

None known.

## SECTION 13: DISPOSAL CONSIDERATIONS

### Disposal:

Avoid release to the environment. Do not dispose of to any sewer, on the ground, or into any body of water. Dispose of to a licensed waste disposal contractor in accordance with local, regional, national or international regulations.

### Empty containers:

Empty containers may contain harmful residue or vapors. Labels should not be removed from containers until they have been cleaned. Dispose of or recycle packaging in accordance with local, regional, national or international regulations.

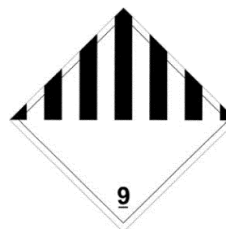
### Additional advice / information:

It is the responsibility of the user to determine, at the time of disposal, whether product meets the RCRA criteria for hazardous waste.

## SECTION 14: TRANSPORT INFORMATION

### US Dept. of Transportation (DOT):

	Non-Bulk	Bulk
UN Number	Not regulated.	Not normally regulated. IF SHIPPED AT TEMPERATURES AT OR ABOVE 100°C the following requirements apply: UN3257
Proper Shipping Name	Lubricant oil	Elevated temperature liquid, n.o.s. (polyisobutylene)
Hazard Class	Not applicable.	9
Packing Group	Not applicable.	III
Special provisions	Not applicable.	IB1, T3, TP3, TP29
Packaging exceptions	Not applicable.	None.
NAERG number	171	128
Placard advisory	Not applicable.	CLASS 9
Label(s) required	Not applicable.	CLASS 9
Quantity Limitations:		
Passenger aircraft/rail	Not applicable.	Forbidden
Cargo aircraft only	Not applicable.	Forbidden



### UN Model Regulations (annexes to the Recommendations on the Transport of Dangerous Goods):

Not determined.

### IMDG Code:

Product does not meet the criteria for marine pollutant classification. See U.S. Dept. of Transportation (DOT).

### IBC Code / Annex II of MARPOL 73/78:

Not determined.

**Additional advice / information:** None.

## SECTION 15: REGULATORY INFORMATION

### U.S. Federal Regulations:

TSCA: All components are on the inventory or exempt from listing.

SARA Title III:

Sections 311/312 Hazard Classes:

Acute health hazard:	Yes
Chronic health hazard:	No
Fire hazard:	Yes
Reactive hazard:	No
Release of pressure hazard:	No

Section 313 Form R reporting:

Zinc diamylidithiocarbamate, CASRN 15337-18-5, < 1% bw concentration.

Section 302 Extremely Hazardous Substances (EHS) / CERCLA Hazardous Substances:

CERCLA: Zinc and compounds, CASRN N/A, No RQ assigned to this generic class.

**U.S. State Regulations:**

California: Product does not intentionally contain any Proposition 65 chemicals. Additionally, we do not routinely analyze products for impurities which may be such chemicals.

**International Inventories:**

Components of this product are compliant with, or listed on, one or more of the following: Australia (AICS), Canada (DSL, NDSL), China (IECSC), Japan (ENCS), Korea, New Zealand (NZIoC), Philippines (PICCS).

EU: To obtain REACH compliance status, please email us at sales@mpclubricants.com.

**Other regulatory information:** None.

**SECTION 16: OTHER INFORMATION****SDS History**

Issue date: 8 September 2005  
Revision date: 15 July 2014  
Revision number: 03  
Revision indicator: This SDS has been revised as follows:  
The following sections have been updated:  
SECTION 2  
SECTION 5  
SECTION 6  
SECTION 8  
SECTION 10  
SECTION 11  
SECTION 14  
Prepared by: Technical Dept.

**Acronym Legend:**

ACGIH American Conference of Governmental Industrial Hygienists  
BCF Bioconcentration Factor  
CAS Chemical Abstracts Service  
CERCLA Comprehensive Environmental Response, Compensation and Liability Act (Superfund)  
EPCRA Emergency Planning and Community Right-to-Know  
GHS Globally Harmonized System of Classification and Labelling of Chemicals  
HMIS Hazardous Material Information System  
IARC International Agency for Research on Cancer  
IBC Intermediate Bulk Container  
IMDG International Maritime Dangerous Goods Code  
LC<sub>50</sub> Lethal Concentration  
LD<sub>50</sub> Lethal Dose  
LOAEL Lowest Observed Adverse Effect Level  
NFPA National Fire Protection Association  
NIOSH National Institute for Occupational Safety & Health  
NOAEL No Observed Adverse Effect Level  
NTP National Toxicology Program  
OSHA Occupational Health and Safety Administration  
PEL Permissible Exposure Limit  
RQ Reportable Quantity  
SARA U.S. EPA Superfund Amendments and Reauthorization Act  
STEL Short-Term Exposure Limit  
TLV Threshold Limit Value  
TPQ Threshold Planning Quantity  
TWA Time-Weighted Average  
VOC Volatile Organic Compound

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