

Safety Data Sheet

Conforms to HCS 2009 CFR 1910.1200

Section 1 Identification

Product identifier

Product Name STAFIRE 5W40 Full Synthetic HD Diesel

Material Use Automobile motor oil, lubricant

Uses advised / not advised All others.

Manufacturer

Coolants Plus Inc.
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1-888-258-8723

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0

Company contact

1-888-258-8723 - Andrewz@coolantsplus.com

In case of emergency

CHMHC in USA and Canada 1 800 424-300 24/7
CHMHC Outside USA and Canada 1 703-527-3887 24/7

Section 2 Hazards Identification

OSHA HCS Status This product is not considered hazardous under the 2012 OSHA Hazard Communication standard (29 CFR 1910.1200).

Classification of the substance or mixture Not classified.

HS Label Elements

Hazard pictograms No pictogram.

Signal word No signal word.

Hazard statement No known significant effects or critical hazards.

Precautionary statements

Prevention Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Response Not applicable.

Storage Not applicable.

Disposal Not applicable.

Hazards not otherwise classified (HNOC) Defatting to the skin. Hot motor oil may cause potentially serious burns.

Other information Some MOO OI based motor oils may contain hazardous components which have the potential to cause skin cancer. See toxicological information, Section 11 of this MSDS for details.

Section 3 Composition Information on Ingredients

Petroleum mineral oil lubricant base stock with proprietary performance additives mixture.

Substance Mixture

Components Name	CAS number	Weight %
Lubricant Synthetic Base Oil (Petroleum High refined mineral oils (C15-C50)	Mixture	70 %
Passenger Car Motor Oil Additives Mixture	Confidential	1 - 10
Dinodialkyl diisopropylate	844-42-3	0 - 1%

This product does not contain known hazardous materials at the $\geq 1\%$ level or known carcinogens at the $\geq 0.1\%$ level as defined in 29 CFR 1910.1200.

- Contains one or more of the following CAS numbers: 4742-52-5, 4742-54-7, 4742-05-0, 4742-51-1, 4742-47-8, 4742-58-1, 4742-01-4, 4742-53-1, 4742-71-8.

The exact percentage of composition has been withheld as a trade secret.

Section 4 First Aid Measures

Description of necessary first aid measures

- General Advice** No specific first aid measures are required. Get medical attention if irritation develops and persists.
- Eye Contact** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eye all to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention if irritation develops and persists.
- Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.
- Inhalation** In case of inhalation of decomposition products in a fire, symptoms may be delayed. If inhaled, remove to fresh air. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical attention if symptoms occur.
- Ingestion** Do not induce vomiting. Drink plenty of water. If symptoms persist, call a physician.
- Protection of first responders** No action should be taken involving any personal risk or without suitable training.

Most important symptoms and effects both acute and delayed

See Section 3 for more detailed information on health effects and symptoms

Most important

Symptoms and Effects Personnel with pre-existing skin disorders should avoid contact with this product. Under normal use conditions, no adverse effects to health are known.

Eye Contact Not expected to cause prolonged or significant eye irritation.

Skin Contact Contact with skin is not expected to cause prolonged or significant irritation. Contact with skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.

Inhalation Not expected to be harmful if inhaled. Contains petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficult breathing.

Ingestion Not expected to be harmful if swallowed.

Note to physician treat symptomatically.

Section 5 Fire Fighting Measures

OSHA Flammable Category

None

UN Fire Code

Class III

Flash Point

17.7 °C (350 °F)

Extinguishing Media

Suitable Media

In case of fire, use water foam, alcohol resistant foam, dry chemical or carbon dioxide (CO2) extinguisher or spray.

Unsuitable Media

Do not use water jet.

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition as product will burn. Contact with strong oxidizers may cause fire. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be contained, prevented from being discharged to an waterway, sewer or drain and disposed of in accordance with local regulations.

Hazardous Combustion Products

Combustion products may include the following: Carbon dioxide (CO2), Carbon monoxide (CO), and nitrogen oxides.

Protection of Fire Fighters

Promptly isolate the scene removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving an personal risk or without suitable training. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/IOH approved or equivalent and full protective gear.

Section 6 Accident Release Measures

Personal Precautions Protective Equipment and Emergency Procedures

For non-emergency personnel

No action shall be taken involving an personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of an information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental Precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). See Section 12 for ecological information.

Methods and Materials for containment and clean up

Small Spills

Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large Spills

Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

Other: If reportable quantity is exceeded or if spills enter a body of water, report immediately to the EPA's National Response Center at 800-424-8802. Check with your local and state regulators regarding their reporting requirements.

Section 7 Handling and Storage

Precautions for safe handling

Protective Measures

Eye protection and face shield should be used if material is used under conditions that increase the chances of splattering. Put on appropriate personal protective equipment (see Section 8) Keep out of reach of children.

Advice on General Occupational Hygiene

Do not get in eyes, on skin or on clothing. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage Including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Use appropriate containment to avoid environmental contamination. Avoid contaminating soil or releases into sewerage or drainage systems and bodies of water.

Special handling

Static Hazard Electrostatic charge may accumulate and create a hazardous condition when handling this material. Do minimize this hazard, bonding and grounding may be necessary but not, themselves, be sufficient.

Section 8 Exposure Controls Personal Protection

Control Parameters

Occupational Exposure Limits

Chemical Name	ACGIH		OSHA		NIOSH	
	TLV	STEL	TLV	STEL	TWA	Ceiling
Lubricant Base Oil (Petroleum) Highly refined mineral oils (C15-C50)	5 mg/m ³ (mist)	10 mg/m ³ (mist)	5 mg/m ³ (mist)			

Adequate engineering controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual Protection Measures

Hygiene Measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potential contaminated clothing. Wash contaminated clothing before reusing. Ensure that showers and safety showers are close to the workstation location.

Eye/Face Protection

Wear safety glasses with side shields. A face shield may be necessary under some conditions.

Skin and Body Protection

Hand Protection

Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended nitrile gloves. Consult your supervisor or standard Operating Procedure (SOP) for special handling instructions.

Body Protection

No protective equipment is needed under normal use conditions. For non-routine tasks, personal protection equipment for the body should be selected based on the task being performed and the risks involved.

Other skin protection

Appropriate footwear and an additional skin protection measures should be selected based on the task being performed and the risks involved.

Respiratory protection

No respirator protection is normally required. If user operation generates an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from measured concentrations of this material. The correct choice of respirator protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respirator equipment. For air-purifying respirators use a particulate cartridge. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection

Section 7 Physical and Chemical Properties

Attention: Data represents typical or target values and are not intended to be specifications

Appearance

Physical State

1 Liquid

Color

1 Clear amber

Odor

1 Petroleum odor

Odor threshold

1 Not available

pH

1 Not applicable

Pour Point

1 -11C to -3C 15.8 to -32.8 100ppical or Carbet

Oil Point

1 Not available

Fish Point (Closed cup)

1 17C 350 100ppical or Carbet

Evaporation rate

1 1 Butyl acetate 1

Flammability (solid)

1 Not applicable. Based on - Physical state

Lower and upper explosive limits

1 Not available

Explosion pressure

1 0.01 mmHg Maximum @ 37.8 C 100

Explosion density (Air)

1 1 Minimum

Relative density

1 0.8 - 0.88 k at 15C 100ppical or Carbet

Solubility

1 In soluble in water

Partition coefficient

1 Not available

Octanol/water

Autoignition temperature

1 Not available

Decomposition temperature

1 Not available

Viscosity (cSt @ 40 C)

1 4 to 100 mm2/s cSt @ 40 C 104 100ppical or Carbet

Viscosity (cSt @ 100 C)

1 5 to 17.1 mm2/s cSt @ 100 C 212 100ppical or Carbet

OC

1 None

Section 9 Stability and Reactivity

Reactivity

1 Not reactive under normal storage conditions

Chemical stability

1 Stable under normal storage conditions

Possibility of hazardous reactions

1 None under normal processing

Hazardous polymerization

1 Hazardous polymerization does not occur.

Conditions to avoid

1 Heat, flames and sparks.

Incompatible materials

1 Oxidizing agents, Halogens, Halogenated compounds

Hazardous decomposition products

1 May include fumes, Oil vapors, Smoke, Carbon Oxides (including carbon monoxide and carbon dioxide), Aldehydes, Nitrogen oxides, and incomplete combustion products.

Section 10 Toxicological Information

Information on toxicologic effects

Substance Mixture

Acute Toxicity	Hazard	Additional Information	C50/50 data
Inhalation	unlikely to be harmful		typical for mineral oil 2.18 mg/l rat mist, estimated
Dermal	unlikely to be harmful		2000 mg/l rat estimated
Oral	unlikely to be harmful		2000 mg/l rat estimated

- Aspiration hazard** Not expected to be an aspiration hazard.
- Skin Corrosion/Irritation** May cause mild skin irritation. Repeated exposure may cause skin dryness or cracking.
- Serious Eye Dose Irritation** May cause mild eye irritation.
- Skin Sensitization** No information on the mixture, however none of the components have been classified for skin sensitization or are below the concentration threshold for classification in the formulation.
- Respiratory Sensitization** No information on the mixture, however none of the components have been classified for skin sensitization or are below the concentration threshold for classification in the formulation.
- Specific Target Organ Toxicity (Single Exposure) (STOT SE)** No information on the mixture, however none of the components have been classified for target organ toxicity or are below the concentration threshold for classification in the formulation.
- Specific Target Organ Toxicity (Repeated Exposure) (STOT RE)** No information on the mixture, however none of the components have been classified for target organ toxicity or are below the concentration threshold for classification in the formulation.
- Carcinogenicity** No information on the mixture, however none of the components have been classified for carcinogenicity or are below the concentration threshold for classification in the formulation.
- Gen Cell Mutagenicity** No information on the mixture, however none of the components have been classified for germ cell mutagenicity or are below the concentration threshold for classification in the formulation.
- Reproductive Toxicity** No information on the mixture, however none of the components have been classified for reproductive toxicity or are below the concentration threshold for classification in the formulation.

Information on Toxicity Effects of Components

Lubricant Base Mineral Oil (Petroleum)

Mineral oils are known to cause cancer because of carcinogenic components (e.g. benzene). The lubricant base mineral oils in this product have been fully refined via a variety of processes including severe solvent extraction, severe hydro cracking or severe hydro treating to reduce aromatics and improve performance characteristics. The oils in this product meet the IP-34 criteria of less than 3 percent PHAs and are not considered to be a carcinogen in the International Agency for Research on Cancer.

One of the oils in this product requires a cancer warning under the OSHA Hazard Communication standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified in the International Agency for Research on Cancer (IARC) as carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B). These oils have not been classified in the American Conference of Governmental Industrial Hygienists (ACGIH) as confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

Used Motor oils

During use in engines, contamination of oil with low levels of cancer-causing combustion products occurs. Used engine oils have been shown to cause skin cancer in mice following repeated application and continuous exposure. Brief or intermittent skin contact with used oil is not expected to have serious effects on humans if the oil is thoroughly removed.

was in with soap and water.

Numerical Measures of Toxicity

Unknown Acute Toxicity 0 of the mixture consists of ingredients of unknown toxicity

Acute toxicity estimates there is no data available.

The following values are calculated based on chapter 3.1 of the MSD document.

ATE inhalation - there is no data available

ATE ingestion - there is no data available

Section 3 Ecological Information

The information is based on data available for the material, the components of the material, and similar materials.

Ecotoxicity Not expected to be harmful to aquatic organisms.

Mobility Base oil component low solubility and floats and is expected to migrate from water to land. Expected to partition to sediment and wastewater solids.

Soil water partition coefficient Not available.

Persistence and degradation
Biodegradation Base oil component expected to be inherently biodegradable.

Bioaccumulative potential
Bioaccumulation This product is not expected to bioaccumulate through food chain in the environment.

Other adverse effects No known significant effects or critical hazards.

Other ecological information Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 4 Disposal Considerations

Disposal recommendations based on material supplied

Waste treatment methods

Product waste Significant quantities of waste product residues should not be disposed of via the sanitary sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and ancillary products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Incineration or landfill should only be considered when recycling is not feasible. Oil collection services are available for used oil recycling.

Containers and packaging Empty containers or liners may retain some product residues and could pose a potential fire and explosion hazard. Do not cut, puncture, or weld containers.

Other information Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 4 Transport Information

Hazard information Petroleum lubrication oil - Not regulated.

	OE Classification	IMDG	IAEA
UN Number	Not regulated	Not regulated	Not regulated
Proper shipping name	Petroleum lubrication oil	Petroleum lubrication oil	Petroleum lubrication oil
Hazard class(es)	-	-	-
Packaging group	-	-	-

Environmental Hazards	0	0	0
Marine Pollutant	0	0	0
Addition information	-	-	-

Special Precautions for user Transport within user's premises. Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 5 Regulatory Information

United States Regulations

United States Inventory TSCA All components are listed or exempted.

SARA 302 No products were found.

SARA 304

Immediate / Acute Health Effects 0
 Related / Chronic Health Effects 0
 Fire Hazard 0
 Sudden Release of Pressure Hazard 0
 Reactivity Hazard 0

SARA 311
 The following components of this material are found on the PCOA 313 list
 Incidental Disposal 1.0

Supplier notification This product does not contain any hazardous ingredients at or above regulated thresholds.

CWA / Clean Water Act This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act 40 CFR 122.21 and 40 CFR 122.42

CERCLA This material, as supplied, does not contain any substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) 40 CFR 302

State Regulations

Massachusetts One of the components are at or above regulated thresholds.

New Jersey Petroleum Oil / Motor Oil

Pennsylvania One of the components are at or above regulated thresholds.

California Proposition 65 This product contains a chemical known to the State of California to cause cancer.
 One.

Canada

WHMIS Hazard Class Not regulated.

International Chemical Inventories

All components comply with the following chemical inventory requirements: ACI (Australia), C (Canada), CE (European Union), C (China), CI (India), PICC (Philippines)

Section Other Information

NFPA Rating	Health Hazard 0	Flammability 0	Instability Reactivity 0
HMIS Rating	Health Hazard 0	Flammability 0	Physical Hazards 0

PA HMI Hazard Rating: 0 - Minimum Hazard, 1 - Slight Hazard, 2 - Moderate Hazard, 3 - High Hazard, 4 - Extreme Hazard. Chronic Hazard Indicator, PPE - Personal Protective Equipment Index. These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coatings Association for HMI or Hazardous Material Identification System.

Key to Abbreviations

OSHA Occupational Safety and Health Administration
ACGIH American Conference of Industrial Hygienists
ALD Acute Lethal Dose Estimate
COC Concentration Coefficient
CA Number of Chemical Abstracts Service Registered Number
cvt Centistroke (mm²/s)
HCS Global Harmonized System of Classification and Labeling of Chemicals
IAA International Air Transport Association
IBC Intermediate Bulk Container IMO International Maritime
 Container Code

Log Pow Logarithm of the octanol/water partition coefficient
OEL Occupational Exposure Limit
ALD Acute Lethal Dose Estimate
TLV Short term exposure limit A Time weighted average
 Limitations
 Number of Limitations Number, a four digit number assigned to
 the Limitations
 Committee of Experts on the Transport of Dangerous Goods.

Prepared by COOLANTS PLUS INC

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Status Final

Revision Note All Sections First Version in OSHA HCS SDS format

Consumer Product Labeling Act of 2000 Energy Conservation Certification

For Consumer Product Packages This product has been evaluated and is certified to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 500 and enforced by the Consumer Product Safety Commission. Where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the test protocols. No testing is required to certify compliance with the provisions. The date of the manufacturing is stamped on the product container.

Disclaimer

All reasonable practical steps have been taken to ensure the information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warrant or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with another materials or in any process, unless specified in the text. This information is furnished upon condition that the person receiving it shall make their own determination of the suitability of the material for their particular purpose.

End of Safety Data Sheet