Safety Data Sheet

Product identifier used on the label: **STARFIRE Premium Air-Cooled** 2-CYCLE
Revision Date: 09-23-2021
Replaces: 08-28-2021

1. Identification

Product identifier used on the label:	**STARFIRE Premium Air-Cooled 2-CYCLE**
Other means of identification:	
Synonyms:	No data available

Recommended use of the chemical and restrictions on use:

Recommended use:	Two Cycle Engine Oil
Restrictions on use:	Uses other than those described above
Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:	Coolants Plus Inc. 2570 Van Hook Ave Hamilton, OH 45015
Phone number:	+01 (888) 258-8723
E-mail address:	andrewz@coolantsplus.com
Emergency phone number:	CHEMTREC: +1 (800) 424-9300 International: +01 (703) 527-3887

2. Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

GHS Hazard Symbols:

GHS Classification:

Skin Corrosion/Irritation Category 2

Serious Eye Damage/Eye Irritation Category 2B

Germ Cell Mutagenicity Category 1B

Carcinogenicity Category 1A

Reproductive Toxicity Category 2

Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 1

Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 1

Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category

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	Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3
	Hazardous to the aquatic environment - Acute Category 1
	Hazardous to the aquatic environment - Chronic Category 1
Signal Word:	Danger
Hazard Statements:	Causes skin and eye irritation; May cause genetic defects; May cause cancer.; Suspected of damaging fertility or the unborn child.; Causes damage to organs; Causes damage to organs through prolonged or repeated exposure; Very toxic to aquatic life; Very toxic to aquatic life with long lasting effects
Precautionary Statements:	
Prevention:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
Response:	If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed: Call a poison center/doctor/... If exposed or concerned: Get medical advice/attention. Get medical advice/attention if you feel unwell. Specific treatment (see Sections 4 - 8 of Safety Data Sheet). If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Collect spillage.
Storage:	Store locked up.
Disposal:	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazards not otherwise classified:	Repeated exposure may cause skin dryness or cracking. Flammable vapors can accumulate in head space of closed systems.

3. Composition/information on ingredients

Chemical Name	Common name and synonyms	CAS#	%
Petroleum distillates,	No data available	64742-54-7	30 - 60

hydrotreated heavy paraffinic			
Distillates, petroleum, straight-run middle	No data available	64741-44-2	10 - 30
Distillates, petroleum, hydrodesulfurized middle	No data available	64742-80-9	10 - 30
Distillates, petroleum, hydrodesulfurized light catalytic cracked	No data available	68333-25-5	10 - 30
Kerosene	No data available	8008-20-6	10 - 30
Residual oils (petroleum), solvent dewaxed	No data available	64742-62-7	10 - 30
Kerosine, petroleum, hydrodesulfurized	No data available	64742-81-0	7 - 13
Light hydrocracked distillate	No data available	64741-77-1	3 - 7
Mineral oil, white	No data available	8042-47-5	1 - 5
Naphthalene	No data available	91-20-3	0.1 - 1
Toluene	No data available	108-88-3	0.1 - 1
Ethylbenzene	No data available	100-41-4	0.1 - 1
Benzene	No data available	71-43-2	0.1 - 1
Biphenyl	No data available	92-52-4	0.1 - 1

One or more hazardous ingredient(s) is claimed as a trade secret under the OSHA Hazard Communication Standard. The hazards of this (these) ingredient(s) are given on this SDS.

4. First-aid measures

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion:

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately.

Eye Contact: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin Contact: If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Ingestion: Seek medical attention immediately or call the Poison control center. Do not induce vomiting. If patient is fully conscious, give up to two glasses of water. Provide medical care provider with this SDS.

Most important symptoms/effects, acute and delayed:	Causes skin and eye irritation Causes damage to organs. Causes damage to organs through prolonged or repeated exposure.
Indication of immediate medical attention and special treatment needed, if necessary:	Specific treatment (see Sections 4 - 8 of Safety Data Sheet). If exposed or concerned: Get medical advice/attention. If exposed: Call a poison center/doctor/... Get medical advice/attention if you feel unwell.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media:

Suitable extinguishing media:	Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire. Do not direct a stream of water into the hot burning liquid.
Unsuitable extinguishing media:	No data available
Specific hazards arising from the chemical:	Material may be ignited only if preheated to temperatures above the high flash point, for example in a fire.
Hazardous combustion products:	Carbon dioxide, Carbon monoxide
Special protective equipment and precautions for fire-fighters:	Do not enter fire area without proper protection including self- contained breathing apparatus and full protective equipment. Use methods for the surrounding fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Avoid release to the environment.
Methods and materials for containment and cleaning up:	Collect spillage.

7. Handling and storage

Precautions for safe handling:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
Conditions for safe storage, including any incompatibilities:	
Safe storage conditions:	Store locked up.

Materials to Avoid/Chemical Incompatibility: Strong oxidizing agents

8. Exposure controls/personal protection

OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available:

Chemical component	OSHA PEL	ACGIH TLV	ACGIH STEL	IDLH	US WEEL
Petroleum distillates, hydrotreated heavy paraffinic	5 mg/m3 TWA	5 mg/m3 TWA	10 mg/m3 STEL	No data available	No data available
Kerosene	No PEL	200 mg/m3 TWA (application restricted to conditions in which there are negligible aerosol exposures, total hydrocarbon vapor, listed under Kerosene/Jet fuels)	No STEL	No data available	No data available
Kerosine, petroleum, hydrodesulfurized	No PEL	200 mg/m3 TWA (application restricted to conditions in which there are negligible aerosol exposures, total hydrocarbon vapor, listed under Kerosene/Jet fuels)	No STEL	No data available	No data available
Naphthalene	10 ppm TWA;	10 ppm TWA	No STEL	250 ppm IDLH	No data

	50 mg/m3 TWA				available
Toluene	200 ppm TWA	20 ppm TWA	No STEL	500 ppm IDLH	No data available
Benzene	10 ppm TWA (applies to industry segments exempt from the benzene standard at 29 CFR 1910.1028); 1 ppm TWA	0.5 ppm TWA	2.5 ppm STEL	500 ppm IDLH	No data available
Ethylbenzene	100 ppm TWA; 435 mg/m3 TWA	20 ppm TWA	No STEL	800 ppm IDLH (10% LEL)	No data available
Biphenyl	0.2 ppm TWA; 1 mg/m3 TWA	0.2 ppm TWA	No STEL	100 mg/m3 IDLH	No data available

Appropriate engineering controls: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

Individual protection measures, such as personal protective equipment:

Respiratory Protection: Do not breathe dust/fume/gas/mist/vapors/spray.

Respirator Type(s): If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Eye protection: Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses.

Skin protection: Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves: Neoprene, Nitrile

General hygiene conditions: Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

9. Physical and chemical properties

Appearance (physical state, color etc.):	
Physical state:	Liquid
Color:	Blue
Odor:	Mild
Odor Threshold:	Not determined
pH:	No data available
Melting point/freezing point:	
Melting Point:	No data available
Freezing point:	No data available
Initial boiling point and boiling range **(°C)**:	No data available
Flash Point (°C):	165
Evaporation Rate:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits:	
Upper flammability or explosive limits:	Not established
Lower flammability or explosive limits:	Not established
Vapor pressure:	= 10 - 210 MMHG > 3 MMHG
Vapor density:	No data available
Relative density:	0.86
Solubility(ies):	Negligible; 0-1%
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition Temperature:	Not determined
Viscosity:	30.07

10. Stability and reactivity

Reactivity:	There are no known reactivity hazards associated with this product.

Chemical stability:	Stable under normal conditions.
Possibility of hazardous reactions:	None expected under standard conditions of storage.
Conditions to avoid (e.g., static discharge, shock, or vibration):	Temperatures above the high flash point of this combustible material in combination with sparks, open flames, or other sources of ignition. Moisture (will lead to product performance degradation).
Incompatible materials:	Strong oxidizing agents
Hazardous decomposition products:	Carbon monoxide, carbon dioxide.

11. Toxicological information

Description of the various toxicological (health) effects and the available data used to identify those effects:

Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact):	Inhalation, Ingestion, Skin contact, Eye contact
Symptoms related to the physical, chemical and toxicological characteristics:	Causes skin and eye irritation Causes damage to organs. Causes damage to organs through prolonged or repeated exposure.

Delayed and immediate effects and also chronic effects from short- and long-term exposure:

Ingestion:	No hazard in normal industrial use. Estimated to be > 5.0 g/kg.
Skin Contact:	Causes skin and eye irritation
Absorption:	Estimated to be > 5.0 g/kg; practically non-toxic
Inhalation:	No hazard in normal industrial use. Likely to be moderately toxic based on animal data.
Eye Contact:	The material is likely to be moderately irritating to eyes based on animal data. Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.
Sensitization:	Non-hazardous under Respiratory Sensitization category.No data available to indicate product or components may be a skin sensitizer.
Mutagenicity:	Mutagenic affects in humans may occur.
Carcinogenicity:	Contains a known human carcinogen.
Reproductive toxicity	Contains a substance that is a possible reproductive system hazard based on animal studies at doses that could be encountered in the workplace. Possible reproductive hazard.
STOT-single exposure:	Classification has been based on toxicological information of the

components in Section 3.

STOT-repeated exposure: Classification has been based on toxicological information of the components in Section 3.

Aspiration hazard: Based on available data, the classification criteria are not met.

Other information: None known.

Numerical measures of toxicity (such as acute toxicity estimates):

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Biphenyl	Oral LD50 Rat > 1900 mg/kg	Dermal LD50 Rabbit > 2500 mg/kg	Inhalation LC50 (4h) Mouse > 0.275 mg/L
Toluene	Oral LD50 Rat 2600 mg/kg	Dermal LD50 Rabbit 12000 mg/kg	Inhalation LC50 (4h) Rat 12.5 mg/L
Ethylbenzene	Oral LD50 Rat 3500 mg/kg	Dermal LD50 Rabbit 15400 mg/kg	Inhalation LC50 (4h) Rat 17.4 mg/L
Benzene	Oral LD50 Rat > 930 mg/kg	Dermal LD50 Rabbit > 8200 mg/kg	Inhalation LC50 (4h) Rat 13050 - 14380 ppm
Naphthalene	Oral LD50 Rat 490 mg/kg	Dermal LD50 Rabbit 1120 mg/kg	Inhalation LC50 (1h) Rat > 340 MG/M3
Mineral oil, white	Oral LD50 Rat > 5000 mg/kg		
Light hydrocracked distillate	Oral LD50 Rat 3200 mg/kg	Dermal LD50 Rabbit > 2000 mg/kg	Inhalation LC50 (4h) Rat 4.65 mg/L
Kerosine, petroleum, hydrodesulfurized	Oral LD50 Rat > 5000 mg/kg	Dermal LD50 Rabbit > 2000 mg/kg	Inhalation LC50 (4h) Rat > 5200 MG/M3
Residual oils (petroleum), solvent dewaxed	Oral LD50 Rat > 5000 mg/kg	Dermal LD50 Rabbit > 2000 mg/kg	Inhalation LC50 (4h) Rat 2.18 mg/L
Kerosene	Oral LD50 Rat > 5000 mg/kg	Dermal LD50 Rabbit > 2000 mg/kg	Inhalation LC50 (4h) Rat > 5.28 mg/L
Distillates, petroleum, straight-run middle	Oral LD50 Rat > 5000 mg/kg	Dermal LD50 Rabbit > 2000 mg/kg	Inhalation LC50 (4h) Rat 1.78 mg/L
Distillates, petroleum, hydrodesulfurized middle	Oral LD50 Rat > 5000 mg/kg	Dermal LD50 Rabbit > 2000 mg/kg	Inhalation LC50 (4h) Rat 4.6 mg/L
Distillates, petroleum, hydrodesulfurized light catalytic cracked	Oral LD50 Rat 3200 mg/kg	Dermal LD50 Rabbit > 2000 mg/kg	Inhalation LC50 (4h) Rat 4.65 mg/L
Petroleum distillates, hydrotreated heavy paraffinic	Oral LD50 Rat > 15000 mg/kg	Dermal LD50 Rabbit > 5000 mg/kg	

Is the hazardous chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA:

Chemical Name	OSHA Carcinogen	IARC Carcinogen	NTP Carcinogen
Benzene	Y	Y	Y
Ethylbenzene	Y	Y	N
Naphthalene	Y	Y	Y

12. Ecological information

Ecotoxicity (aquatic and terrestrial, where available): Moderate ecological hazard. This product may be dangerous to plants and/or wildlife.

Ecological Toxicity Data:

Chemical Name	CAS#	Aquatic EC50 Crustacea	Aquatic ERC50 Algae	Aquatic LC50 Fish
Biphenyl	92-52-4	EC50 (48h) Daphnia magna 0.63 - 0.85 mg/L	No data available	LC50 (96h) Rainbow Trout 1.4 - 1.6 mg/L LC50 (96h) Lepomis macrochirus (Bluegill) 4.3 - 5.1 mg/L LC50 (96h) Pimephales promelas (Fathead Minnow) 1.17 - 1.81 mg/L LC50 (96h) Pimephales promelas (Fathead Minnow) 1.65 - 2.29 mg/L
Toluene	108-88-3	LC50 (48h) Daphnia magna 5.46 - 9.83 mg/L	Aquatic ERC50 (96h) > 433 mg/L	LC50 (96h) 15.22 - 19.05 mg/L
Benzene	71-43-2	EC50 (48h) Daphnia magna 8.76 - 15.6 mg/L	Aquatic ERC50 (72h) 29 mg/L	LC50 (96h) Rainbow Trout 5.3 mg/L
Ethylbenzene	100-41-4	EC50 (48h) Daphnia magna 1.8 - 2.4 mg/L	Aquatic ERC50 (72h) 4.6 mg/L	LC50 (96h) Rainbow Trout 11 - 18 mg/L

Naphthalene	91-20-3	EC50 (48h) Daphnia magna 2.16 mg/L	No data available	LC50 (96h) Rainbow Trout 1.6 mg/L
Mineral oil, white	8042-47-5	No data available	No data available	LC50 (96h) > 10000 mg/L
Light hydrocracked distillate	64741-77-1	No data available	No data available	LC50 (96h) BRACHYDANIO RERIO 7.3 mg/L
Kerosine, petroleum, hydrodesulfurized	64742-81-0	EC50 (48h) 4720 mg/L	No data available	LC50 (96h) 45 mg/L
Residual oils (petroleum), solvent dewaxed	64742-62-7	EC50 (48h) Daphnia magna > 1000 mg/L	No data available	LC50 (96h) Rainbow Trout > 5000 mg/L
Distillates, petroleum, hydrodesulfurized light catalytic cracked	68333-25-5	No data available	No data available	LC50 (96h) BRACHYDANIO RERIO 7.3 mg/L
Distillates, petroleum, hydrodesulfurized middle	64742-80-9	No data available	No data available	LC50 (96h) Pimephales promelas (Fathead Minnow) 35 mg/L
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	EC50 (48h) Daphnia magna > 1000 mg/L	No data available	LC50 (96h) Rainbow Trout > 5000 mg/L

Persistence and degradability: Biodegrades slowly.

Bioaccumulative potential: Bioconcentration may occur.

Mobility in soil: This material is expected to have essentially no mobility in soil. It absorbs strongly to most soil types.

Other adverse effects (such as hazardous to the ozone layer): None known.

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: Dispose of contents and container in accordance with local/regional/national/international regulations.

Contaminated packaging: Recycle containers whenever possible.

14. Transport information

Carriage of dangerous goods by road (DOT), rail or inland waterways:

DOT Basic Description:	Not regulated for road transport

International carriage of dangerous goods by sea (IMDG/IMO):

UN number:	Not regulated by IMDG
UN Proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group, if applicable:	Not applicable

International carriage of dangerous goods by air (IATA):

UN number:	Not regulated by IATA
UN Proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group, if applicable:	Not applicable

Environmental hazards (e.g., Marine pollutant (Yes/No)):	Yes
Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):	No data available
Special precautions which a user needs to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises:	No data available

15. Regulatory information

Safety, health and environmental regulations specific for the product in question:

TSCA Status:	All components of this material are on the Active US TSCA Inventory or are exempt.

Regulated Components:

Chemical Name	CAS#	CERCLA	Sara EHS	Sara 313	U.S. HAP
Petroleum distillates,	64742-54-7	N	N	N	N

hydrotreated heavy paraffinic					
Distillates, petroleum, straight-run middle	64741-44-2	N	N	N	N
Distillates, petroleum, hydrodesulfurized light catalytic cracked	68333-25-5	N	N	N	N
Distillates, petroleum, hydrodesulfurized middle	64742-80-9	N	N	N	N
Kerosene	8008-20-6	N	N	N	N
Residual oils (petroleum), solvent dewaxed	64742-62-7	N	N	N	N
Kerosine, petroleum, hydrodesulfurized	64742-81-0	N	N	N	N
Light hydrocracked distillate	64741-77-1	N	N	N	N
Mineral oil, white	8042-47-5	N	N	N	N
Naphthalene	91-20-3	Y	N	Y	Y
Toluene	108-88-3	Y	N	Y	Y
Benzene	71-43-2	Y	N	Y	Y
Ethylbenzene	100-41-4	Y	N	Y	Y
Biphenyl	92-52-4	Y	N	Y	Y

Chemical Name	CAS#	California Prop 65 - Cancer	California Prop 65 - Dev. Toxicity	California Prop 65 - Reprod fem	California Prop 65 - Reprod male
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	N	N	N	N
Distillates, petroleum, straight-run middle	64741-44-2	N	N	N	N
Distillates, petroleum, hydrodesulfurized light catalytic cracked	68333-25-5	N	N	N	N

Distillates, petroleum, hydrodesulfurized middle	64742-80-9	N	N	N	N
Kerosene	8008-20-6	N	N	N	N
Residual oils (petroleum), solvent dewaxed	64742-62-7	N	N	N	N
Kerosine, petroleum, hydrodesulfurized	64742-81-0	N	N	N	N
Light hydrocracked distillate	64741-77-1	N	N	N	N
Mineral oil, white	8042-47-5	N	N	N	N
Naphthalene	91-20-3	Y	N	N	N
Toluene	108-88-3	N	Y	N	N
Benzene	71-43-2	Y	Y	N	Y
Ethylbenzene	100-41-4	Y	N	N	N
Biphenyl	92-52-4	N	N	N	N

California Prop 65
WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

Chemical Name	CAS#	Massachusetts RTK List	New Jersey RTK List	Pennsylvania RTK List	Rhode Island RTK List	Minnesota Hazardous Substance List
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	N	N	N	N	N
Distillates, petroleum, straight-run middle	64741-44-2	N	N	N	N	N
Distillates, petroleum, hydrodesulfurized light catalytic cracked	68333-25-5	N	N	N	N	N
Distillates, petroleum, hydrodesulfurized middle	64742-80-9	N	N	N	N	N
Kerosene	8008-20-6	Y	Y	Y	N	N

Residual oils (petroleum), solvent dewaxed	64742-62-7	N	N	N	N	N
Kerosine, petroleum, hydrodesulfurized	64742-81-0	N	N	N	N	N
Light hydrocracked distillate	64741-77-1	N	N	N	N	N
Mineral oil, white	8042-47-5	N	N	N	N	N
Naphthalene	91-20-3	Y	Y	Y	N	Y
Toluene	108-88-3	Y	Y	Y	N	Y
Benzene	71-43-2	Y	Y	Y	N	Y
Ethylbenzene	100-41-4	Y	Y	Y	N	Y
Biphenyl	92-52-4	Y	Y	Y	N	Y

16. Other information, including date of preparation or last revision.

SDS Prepared by:	CDURSTON
Revision Date:	09-23-2021
Revision Number:	60
Reason for revision:	Activated by Document Formulation Generation
References:	No data available
Other Info:	No data available
Disclaimer:	This safety data sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in the data sheet which we have received from outside sources and we believe the information to be correct, but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product in a safe manner and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as permission or recommendation for the use of any product in a manner that might infringe existing patents. No warranty is made, either expressed or implied.