Safety Data Sheet

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR)

Issuing Date 14-Feb-2020 **Revision Date** 14-Feb-2020 **Revision Number** 1

1. Identification

Product identifier

Product Name **STARFIRE CIREX Compressor DE 46**

Other means of identification

Product Code(s) EC39

Recommended use of the chemical and restrictions on use

Recommended use Ester-Based Compressor Oil

Restrictions on use Avoid formation of mists.

Details of the supplier of the safety data sheet

Supplier Address
Coolants Plus Inc.
2570 Van Hook Ave
Hamilton, OH 45015
888-258-8723

E-mail **info@coolantsplus.com**

Emergency telephone number

Emergency Telephone CHEMTREC: Within USA and Canada: 1-800-424-9300
Outside the USA and Canada: +1 703-741-5970
(collect calls accepted) 24/7

2. Hazard(s) identification

Classification

Not classified.

Label elements

Hazard statements
Not classified.

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Other information

Harmful to aquatic life with long lasting effects.

Unknown acute toxicity

37 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

The product contains no substances which at their given concentration, are considered to be hazardous to health.

4. First-aid measures

Description of first aid measures

Inhalation	Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids.
Skin contact	Wash skin with soap and water.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.

Most important symptoms and effects, both acute and delayed

Symptoms	May cause gastrointestinal discomfort if consumed in large amounts.

Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media	Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Use extinguishing agent suitable for type of surrounding fire.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards arising from the chemical	Containers can burst or explode when heated, due to excessive pressure build-up. Thermal decomposition can lead to release of irritating gases and vapors.
Hazardous combustion products	Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

Explosion data

Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Do not handle until all safety precautions have been read and understood. Ensure adequate ventilation. Use personal protective equipment as required.

Methods and material for containment and cleaning up

Methods for containment Prevent materials or runoff from entering drains, sewers, streams, ground water or bodies of water.

Methods for cleaning up Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13). After cleaning, flush away traces with water.

Reference to other sections For additional information see: Section 8: Exposure controls/personal protection; Section 12: Ecological information; Section 13: Disposal considerations.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Avoid contact with used product. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a cool, well-ventilated place. Do not reuse empty containers. Protect from physical damage.

8. Exposure controls/personal protection

Control parameters

Exposure Limits The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits. Under conditions which may generate mists, the following exposure limits are recommended: Long-term exposure limit (8-hour TWA): 5 mg/m³.

Appropriate engineering controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection If there is a risk of contact: Wear safety glasses with side shields (or goggles).

Hand protection If there is a risk of contact: Wear suitable gloves. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves.

Skin and body protection If there is a risk of contact: Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	
Physical state	Liquid
Color	amber
Odor	Mild Hydrocarbon-like
Odor threshold	No information available

Property	**Values**	**Remarks • Method**
pH	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash point	254 °C / 489.2 °F	Cleveland Open Cup ASTM D 92
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	0.9315	
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	40.2 @ 40 ºC 6.3 @ 100 ºC cSt	ASTM D445
Dynamic viscosity	No data available	None known

Other information

Explosive properties No information available.

Oxidizing properties	No information available.
Softening point	No information available
Pour Point	-43 ºC [ASTM D 97]
Fire Point	280 ºC (COC) [ASTM D 92]
Molecular weight	No information available
VOC Content (%)	No information available
Liquid Density	No information available
Bulk density	No information available

10. Stability and reactivity

Reactivity None under normal use conditions.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid None known based on information supplied.

Incompatible materials None known based on information supplied.

Hazardous decomposition products Thermal decomposition can lead to release of irritating and toxic gases and vapors: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

11. Toxicological information

Information on likely routes of exposure

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

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

ATEmix (oral)	27,054.10 mg/kg
ATEmix (dermal)	8,549.10 mg/kg

Unknown acute toxicity

37 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

12. Ecological information

Ecotoxicity	Harmful to aquatic life with long lasting effects.
Persistence and degradability	No information available.
Bioaccumulation	No information available.
Mobility in soil	No information available.
Other adverse effects	No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.
US EPA Waste Number	No information available.

14. Transport information

DOT	Not regulated
TDG	Not regulated
IATA	Not regulated
IMDG	Not regulated

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA Contact supplier for inventory compliance status.

Chemical name	CAS No	US TSCA Inventory listing	US TSCA active/inactive designation
Bis(tridecyl) adipate	16958-92-2	Present	Active
Ditridecyl phthalate (mixed isomers)	68515-47-9	Present	Active
1,2-Dihydro-2,2,4-trimethylquinoline, oligomers	26780-96-1	Present	Active
Dibutyl [(dipropoxyphosphinothioyl)thio]succinate	68413-47-8	Present	Active
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	68411-46-1	Present	Active
Benzenamine, 2-ethyl-N-(2-ethylphenyl)-, (tripropenyl) derivs.	68608-77-5	Present	Active
Polysulfides, di-tert-dodecyl	68425-15-0	Present	Active
Hydrogenated base oil	64742-70-7	Present	Active
Dihydro-3-(tetrapropenyl)furan-2,5-dione	26544-38-7	Present	Active
Hydrogenated base oil	64742-46-7	Present	Active
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine	110-25-8	Present	Active
1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-	94270-86-7	Present	Active
2,5-bis(octyldithio)-1,3,4-thiadiazole	13539-13-4	Present	Active
Diphenylamine	122-39-4	Present	Active
2,6-Di-tert-butyl-p-cresol	128-37-0	Present	Active
Xylene	1330-20-7	Present	Active
Ethylbenzene	100-41-4	Present	Active
Benzene	71-43-2	Present	Active
Naphthalene	91-20-3	Present	Active

DSL/NDSL Contact supplier for inventory compliance status.

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

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 hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals:.

Chemical name	California Proposition 65
Ethylbenzene - 100-41-4	Carcinogen
Benzene - 71-43-2	Carcinogen Developmental Male Reproductive
Naphthalene - 91-20-3	Carcinogen

U.S. State Right-to-Know Regulations

US State Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ditridecyl phthalate (mixed isomers) 68515-47-9	-	-	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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Disclaimer

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 a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet