1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier
Product name: Starfire Zephyrus 320

Other means of identification
Product Code(s): 90605
Synonyms: Starfire Zephyrus WTGO 320

Recommended use of the chemical and restrictions on use
Recommended Use: Gear Oil, Lubricant.
Uses advised against: All Other Uses

Details of the supplier of the safety data sheet
Supplier Address
Coolants Plus, Inc.
2570 Van Hook Ave.
Hamilton, OH 45015
TEL: 1-888-258-8723

Emergency telephone number
Company Phone Number: 888-258-8723
Emergency spill telephone number: Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification
OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin sensitization Category 1A

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard statements
May cause an allergic skin reaction

Appearance: Amber colored liquid
Physical state: Viscous Liquid
Odor: Mild petroleum odor, Mild sulfur odor

Precautionary Statements - Prevention
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing must not be allowed out of the workplace
Wear protective gloves

Precautionary Statements - Response
Specific treatment (see supplemental first aid instruction on this label)
IF ON SKIN: Wash with plenty of water and soap
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Other information
• May be harmful in contact with skin

Unknown Aquatic Toxicity
0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Trade secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</td>
<td>72623-87-1</td>
<td>51.5</td>
<td>*</td>
</tr>
<tr>
<td>Amines, C12-14-tert-alkyl</td>
<td>68955-53-3</td>
<td>0.03-0.13</td>
<td>*</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General advice
No hazards which require special first aid measures.

Eye contact
Flush eyes for 30 minutes with water. Get medical attention if irritation persists.

Skin contact
Remove contaminated shoes and clothing and cleanse affected area(s) thoroughly by washing with mild soap and water or a waterless hand cleaner. If irritation or redness develops and persists, seek medical attention.

Inhalation
Move exposed persons to fresh air. Consult medical personnel if breathing issues occur.

Ingestion
Do NOT induce vomiting. Consult a physician.

Most important symptoms and effects, both acute and delayed

Symptoms
No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Carbon dioxide (CO₂). Dry chemical. Foam. Water can be used to keep surrounding materials cool.

Small Fires
Always use personal safety equipment. Follow appropriate personal safety procedures, and extinguishing media.
Large Fires

Contact emergency personnel.

Unsuitable extinguishing media

Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Combustible material.

Hazardous combustion products

Carbon monoxide. Carbon dioxide (CO₂).

Explosion data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal protection

Avoid contact with the skin and the eyes. Eye protection or face shield should be used if material is used under conditions that increase the chances of splattering. Wash skin with soap and water if contact occurs. Launder soiled clothing. If spilled, take caution, as material can cause surfaces to become very slippery.

Environmental precautions

Environmental precautions

See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment

Cover with earth, sand, or other non-combustible material followed with plastic sheets to minimize spreading or contact with rain.

Methods for cleaning up

Excess liquid material can be collected using a scoop or shovel and stored for recycling or disposal. Prevent material from entering drains or waterways.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Avoid contact with skin, eyes and clothing. Eye protection or face shield should be used if material is used under conditions that increase the chances of splattering. If contact is made, wash skin with soap and water. Launder soiled clothing. Maximum handling temperature is 70 degrees C (158 F). It is recommended to pump or transfer material at ambient temperature.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep away from heat and sources of ignition. Keep containers closed when not in use. Follow first aid measures if contact occurs, and spill procedures if spill occurs. For packaged material: Store in a cool dry area. For bulk material: store in cool dry area. Always follow local, state, and federal guidelines for storage of material for amount stored.

Incompatible Products

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

This product does not contain any hazardous materials with occupational exposure limits
established by the region specific regulatory bodies.

**Appropriate engineering controls**

**Engineering Controls**
- Showers
- Eyewash stations
- Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face Protection**
If splashes are likely to occur, wear: Goggles. Eye/face Protection.

**Skin and body protection**
Long sleeved clothing. Protective gloves can be worn, if material comes in contact with skin wash with soap and water.

**Respiratory protection**
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations**
Remove and wash contaminated clothing before re-use.

---

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical state</strong></td>
<td>Viscous Liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
<td>Amber colored liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>amber</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Mild petroleum odor Mild sulfur odor</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Melting point/freezing point</strong></td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Boiling Point/Range</strong></td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>220 °C / 428 °F</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Flammability Limit in Air</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Specific gravity</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Water solubility</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Solubility in other solvents</strong></td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Partition coefficient</strong></td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Autoignition temperature</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
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<tr>
<td><strong>Kinematic viscosity</strong></td>
<td>288-352 @40C mm2/s</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dynamic viscosity</strong></td>
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<td></td>
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<tr>
<td><strong>Explosive properties</strong></td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Oxidizing properties</strong></td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Softening point</strong></td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>VOC Content</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Density</strong></td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bulk density</strong></td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under normal conditions.
Possibility of Hazardous Reactions
None under normal processing.
  Hazardous polymerization  Hazardous polymerization does not occur.

Conditions to avoid
High energy sources of ignition. High temperature. Depolymerization begins at 200 °C I 392 °F.
Incompatible materials
Strong oxidizing agents.
Hazardous decomposition products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
No data available

  Inhalation  No data available.

  Eye contact  Avoid contact with eyes. May cause irritation.

  Skin contact  May cause eye/skin irritation. Repeated exposure may cause skin dryness or cracking. May cause sensitization by skin contact.

  Ingestion  Do NOT taste or swallow.

Information on toxicological effects

Symptoms  No information available.

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

Sensitization  May cause sensitization by skin contact.
Germ cell mutagenicity  No information available.
Carcinogenicity  No information available.

Reproductive toxicity  None known.
STOT - single exposure  No information available.
STOT - repeated exposure  No information available.
Aspiration hazard  No information available.

Numerical measures of toxicity - Product Information

Unknown Aquatic Toxicity  0% of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document.

  ATEmix (oral)  9234 mg/kg
  ATEmix (dermal)  3734 mg/kg
  ATEmix (inhalation-dust/mist)  10.74 mg/l
  ATEmix (inhalation-vapor)  915.38 mg/l

12. ECOLOGICAL INFORMATION
Ecotoxicity

0.52% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability
No information available.

Bioaccumulation
No information available.

Other adverse effects
No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging
Do not reuse container.

14. TRANSPORT INFORMATION

DOT
Not regulated

IATA
PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO TI OR IATA DGR

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>Does not comply</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>Does not comply</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>ENCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>IECSC</td>
<td>Does not comply</td>
</tr>
<tr>
<td>KECL</td>
<td>Does not comply</td>
</tr>
<tr>
<td>PICCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>AICS</td>
<td>Does not comply</td>
</tr>
</tbody>
</table>

Legend:

All components in this product are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals.

<table>
<thead>
<tr>
<th>Inventory</th>
<th>List Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSL/NDSL</td>
<td>Canadian Domestic Substances List/Non-Domestic Substances List</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances</td>
</tr>
<tr>
<td>ENCS</td>
<td>Japan Existing and New Chemical Substances</td>
</tr>
<tr>
<td>IECSC</td>
<td>China Inventory of Existing Chemical Substances</td>
</tr>
<tr>
<td>KECL</td>
<td>Korean Existing and Evaluated Chemical Substances</td>
</tr>
<tr>
<td>PICCS</td>
<td>Philippines Inventory of Chemicals and Chemical Substances</td>
</tr>
<tr>
<td>AICS</td>
<td>Australian Inventory of Chemical Substances</td>
</tr>
</tbody>
</table>

U.S. 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

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute health hazard</td>
<td></td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td></td>
</tr>
<tr>
<td>Fire hazard</td>
<td></td>
</tr>
<tr>
<td>Sudden release of pressure hazard</td>
<td></td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td></td>
</tr>
</tbody>
</table>

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

U.S. State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

U.S. EPA Label Information
EPA Pesticide registration number Not Applicable

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Hazards -</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>Personal protection X</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal protection</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>X</td>
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</table>

Issuing Date 04-Mar-2016
Revision Date 04-Mar-2016
Revision Note
Initial Release

Disclaimer
The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of SDS