1. IDENTIFICATION

Product Identifier
Product Name Autoguard Quick Flat Fix

Other means of identification N/A
SDS # AG-043

Recommended use of the chemical and restrictions on use
Recommended Use Tire Repair

Details of the supplier of the safety data sheet
Supplier Address Warren Oil Company, LLC
2340 Highway 301, North
Dunn, NC 28334

Emergency Telephone Number
Company Phone Number 1-800-428-9284
Emergency Telephone (24 hr) CHEMTREC 1-800-424-9300

2. HAZARDS IDENTIFICATION

Physical hazards Flammable aerosols Classification not possible
Gases under pressure Liquefied gas

Health hazards Acute toxicity, inhalation Category 4
Serious eye damage/eye irritation Category 2B
Specific target organ toxicity, repeated exposure Category 2

Environmental hazards Not classified
OSHA defined hazards Not classified

Label elements

Signal word Warning

Hazard statement Contains gas under pressure; may explode if heated. Causes eye irritation. Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure.

Precautionary statement Prevention Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area.
**Response**

If inhaled: Remove person to fresh air and keep in a comfortable position for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If eye irritation persists: Get medical advice/attention.

**Storage**

Protect from sunlight. Store in well-ventilated place.

**Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC)**

None known.

**Supplemental information**

None.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL</td>
<td></td>
<td>107-21-1</td>
<td>3 - &lt; 5</td>
</tr>
<tr>
<td>Trans-1,3,3,3-Tetrafluoroprop-1-ene</td>
<td></td>
<td>29118-24-9</td>
<td>20 - &lt; 30</td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td></td>
<td>70 - &lt; 80</td>
<td></td>
</tr>
</tbody>
</table>

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. FIRST-AID MEASURES

**Inhalation**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.

**Skin contact**

No adverse effects due to skin contact are expected. Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact**

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. No specific first aid measures noted.

**Ingestion**

Not likely, due to the form of the product. In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth.

**Most important symptoms/effects, acute and delayed**

Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Prolonged exposure may cause chronic effects.

**Indication of immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

**General information**

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**


**Unsuitable extinguishing media**

Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

Contents under pressure. Pressurized container may explode when exposed to heat or flame.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see Section 8 of the SDS.

Methods and materials for containment and cleaning up

Refer to attached safety data sheets and/or instructions for use. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Isolate area until gas has dispersed. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see Section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. HANDLING AND STORAGE

Precautions for safe handling:

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind or expose container to heat, flame, sparks, or other sources of ignition. Ground and bond containers when transferring material. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. Suck back of water into the container must be prevented. Do not allow backfeed into the container. Purge air from system before introducing gas. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Do not re-use empty containers. Do not breathe mist or vapor. Avoid contact with eyes. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL (CAS 107-21-1)</td>
<td>Ceiling</td>
<td>100 mg/m³</td>
<td>Aerosol</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trans-1,3,3,-Tetrafluoropr op-1-ene (CAS 29118-24-9)</td>
<td>TWA</td>
<td>800 ppm</td>
</tr>
</tbody>
</table>

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

| Eye/face protection | Wear safety glasses with side shields (or goggles). |
| Skin protection     | Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. |
| Hand protection     | Wear suitable protective clothing. Use of an impervious apron is recommended. |
| Respiratory protection | Chemical respirator with organic vapor cartridge and full face piece if threshold limits are exceeded. |
| Thermal hazards     | Wear appropriate thermal protective clothing, when necessary. |
| General hygiene considerations | When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid
Physical state: Liquid
Form: Aerosol. Liquefied gas.
Color: Opaque. Milky.
Odor: Ammonia
Odor threshold: Not available.

pH: 10.6

Melting point/freezing point: 95 °F (35 °C) estimated

Initial boiling point and boiling range: -2.2 °F (19 °C) estimated

Flash point: None

Evaporation rate: Not available

Flammability (solid, gas): Not applicable

Upper/lower flammability or explosive limits:
- Flammability limit – lower (%): Not available
- Flammability limit – upper (%): Not available
- Explosive limit – lower (%): Not available
- Explosive limit – upper (%): Not available

Vapor pressure: 1.92 hPa estimated

Vapor density: Not available

Relative density: Not available

Solubility(ies):
- Solubility (water): Not available

Partition coefficient (n-octanol/water): Not available

Auto-ignition temperature: Not available

Decomposition temperature: Not available

Viscosity: Not available

Other information:
- Density: 8.34 lbs/gal
- Explosive properties: Not explosive
- Heat of combustion (NFPA 30B): 0.5 kJ/g estimated
- Oxidizing properties: Not oxidizing
- Percent volatile: 70.89% estimated
- Specific gravity: 1
- VOC (Weight %): 5.2%

10. STABILITY AND REACTIVITY

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

Conditions to avoid: Heat. Contact with incompatible materials.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

- **Inhalation**: Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure by inhalation.
- **Skin contact**: No adverse effects due to skin contact are expected.
- **Eye contact**: Causes eye irritation.
- **Ingestion**: Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics: Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

Information on toxicological effects:

- **Acute toxicity**: Harmful if inhaled.
ETHYLENE GLYCOL (CAS 107-21-1)

**Acute**

**Dermal**

<table>
<thead>
<tr>
<th>Species</th>
<th>LD50</th>
<th>mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rabbit</td>
<td></td>
<td>9530</td>
</tr>
</tbody>
</table>

**Oral**

<table>
<thead>
<tr>
<th>Species</th>
<th>LD50</th>
<th>mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat</td>
<td></td>
<td>1650</td>
</tr>
<tr>
<td>Dog</td>
<td></td>
<td>5500</td>
</tr>
<tr>
<td>Guinea pig</td>
<td></td>
<td>8.2</td>
</tr>
<tr>
<td>Mouse</td>
<td></td>
<td>14.6</td>
</tr>
<tr>
<td>Rat</td>
<td></td>
<td>5.89</td>
</tr>
</tbody>
</table>

*Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation**

Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation**

Causes eye irritation.

**Respiratory or skin sensitization:**

- **Respiratory sensitization**: Not a respiratory sensitizer
- **Skin sensitization**: This product is not expected to cause skin sensitization.

**Germ cell mutagenicity**

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

**Carcinogenicity**

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.


Not listed.

**Reproductive toxicity**

This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity – single exposure**

Not classified.

**Specific target organ toxicity – repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard**

Not an aspiration hazard.

**Chronic effects**

May cause damage to organs through prolonged or repeated exposure. May be harmful if absorbed through skin. Prolonged inhalation may be harmful.

---

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Components**

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL (CAS 107-21-1)</td>
<td></td>
</tr>
<tr>
<td>Aquatic Fish</td>
<td>LC50 Fathead minnow (Pimephales promelas) 8050 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

*Estimates for product may be based on additional component data not shown.

**Persistence and degradability**

No data is available on the degradability of this product.

**Bioaccumulative potential**

<table>
<thead>
<tr>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL</td>
<td>-1.36</td>
</tr>
</tbody>
</table>
Mobility in soil

No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do no re-use empty containers.

14. TRANSPORT INFORMATION

DOT
UN number
Not available
UN proper shipping name
Consumer Commodity
Transport hazard class(es)
Class
ORM-D
Subsidiary risk
-
Label(s)
2.2
Packing group
Not applicable
Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.
Special provisions
T50
Packaging exceptions
306
Packaging non bulk
304
Packaging bulk
314, 315

IATA
UN number
UN1950
UN proper shipping name
AEROSOLS
Transport hazard class(es)
Class
2.2
Subsidiary risk
-
Packing group
Not applicable
Environmental hazards
No
Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.
Other Information
Passenger and cargo aircraft
Forbidden
Cargo aircraft only
Forbidden

IMDG
UN number
UN1950
UN proper shipping name
AEROSOLS
Transport hazard class(es)
Class
2.2
Subsidiary risk
- Not applicable

Packing group
Not applicable

Environmental hazards
Marine pollutant
No

EmS
F-D, S-U

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II
Of MARPOL 73/78 and the IBC Code
Not established

IATA; IMDG

General information
Avoid transport on vehicles where the load space is not separated from the driver’s compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers: Ensure that containers are firmly secured. Ensure cylinder valve is closed and not leaking. Ensure valve outlet cap nut or plug (where provided) is correctly fitted. Ensure valve protection device (where provided) is correctly fitted. Ensure adequate ventilation. Ensure compliance with applicable regulations.

15. REGULATORY INFORMATION

US Federal Regulations
This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated

CERCLA Hazardous Substance List (40 CFR 302.4)
ETHYLENE GLYCOL (CAS 107-21-1) Listed

SARA 304 Emergency release notification
Not regulated

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Immediate Hazard – Yes
Delayed Hazard – Yes
Fire Hazard – No
Pressure Hazard – Yes
Reactivity Hazard – No

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous Chemical: No

SARA 313 (TRI reporting)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL</td>
<td>107-21-1</td>
<td>3 - &lt; 5</td>
</tr>
</tbody>
</table>

Other Federal Regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
ETHYLENE GLYCOL (CAS 107-21-1)
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated
Safe Drinking Water Act (SDWA): Not regulated

US State regulations
U.S. California Controlled Substances, CA Department of Justice (California Health and Safety Code Section 11100)
Not listed
ETHYLENE GLYCOL (CAS 107-21-1)
U.S. Massachusetts RTK – Substance List
ETHYLENE GLYCOL (CAS 107-21-1)
U.S. New Jersey Worker and Community Right-to-Know Act
ETHYLENE GLYCOL (CAS 107-21-1)
U.S. Pennsylvania Worker and Community Right-to-Know Law
ETHYLENE GLYCOL (CAS 107-21-1)
U.S. Rhode Island RTK
ETHYLENE GLYCOL (CAS 107-21-1)
U.S. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>(EINECS)</td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemical List (ECL)</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>(PICCS)</td>
<td></td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. OTHER INFORMATION

HMIS® ratings
Health: 2*
Flammability: 1
Physical hazard: 0

NFPA ratings
Health: 2
Flammability: 1
Instability: 0

NFPA ratings

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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