# SAFETY DATA SHEET

**DGF14A - Duraglide Dry Lubricant, Aerosol**


## 1. Identification

**Product identifier**

**Product name**  
DGF14A - Duraglide Dry Lubricant, Aerosol

**Product number**  
MCC-DGF14A, MCC-DGF141

**Recommended use of the chemical and restrictions on use**

**Application**  
Lubricant.

**Details of the supplier of the safety data sheet**

**Supplier**  
MICROCARE CORPORATION

**Manufacturer**  
MICROCARE CORPORATION  
595 John Downey Drive  
New Britain, CT 06051  
United States of America  
CAGE: OATV9  
Tel: +1 860-827-0626  
Fax: +1 860-827-8105  
techsupport@microcare.com

**Emergency telephone number**

**Emergency telephone**  
CHEMTREC 1-800-424-9300 (within the U.S.)  
+1 703-741-5970 (from anywhere in the world)

## 2. Hazard(s) identification

**Classification of the substance or mixture**

**OSHA Regulatory Status**  
This Product is Not Hazardous under the OSHA Hazard Communication Standard.

**Physical hazards**  
Not Classified

**Health hazards**  
Not Classified

**Environmental hazards**  
Not Classified

**Human health**  
Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Mild dermatitis, allergic skin rash.

**Physicochemical**  
Vapors are heavier than air and may travel along the floor and accumulate in the bottom of containers. Not considered to be a significant hazard due to the small quantities used. Gas or vapor displaces oxygen available for breathing (asphyxiant).

**Label elements**

**Hazard statements**  
NC Not Classified
DGF14A - Duraglide Dry Lubricant, Aerosol

Precautionary statements

P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.
P251 Pressurized container: Do not pierce or burn, even after use
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P501 Dispose of contents/ container in accordance with local regulations.
P211 Do not spray on an open flame or other ignition source.

Supplemental label information

Safety data sheet available on request. For use in industrial installations only.

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>HFC-134a Tetrafluoroethane</th>
<th>60-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 811-97-2</td>
<td></td>
</tr>
</tbody>
</table>

Classification

Press. Gas, Liquefied - H280

<table>
<thead>
<tr>
<th>PROPAN-2-OL</th>
<th>1-5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 67-63-0</td>
<td></td>
</tr>
</tbody>
</table>

Classification

Flam. Liq. 2 - H225
Eye Irrit. 2A - H319
STOT SE 3 - H336

The full text for all hazard statements is displayed in Section 16.

Composition comments

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of CFR 1900.1200 TSCA: The ingredients of this product are on the TSCA Inventory.

Composition

4. First-aid measures

Description of first aid measures

General information

Never give anything by mouth to an unconscious person. Do not induce vomiting. Place unconscious person on the side in the recovery position and ensure breathing can take place. If breathing stops, provide artificial respiration. Consult a physician for specific advice.

Inhalation

Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention.

Ingestion

Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Get medical attention.

Skin Contact

Remove contaminated clothing and rinse skin thoroughly with water.
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Eye contact
Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Consult a physician for specific advice.

Most important symptoms and effects, both acute and delayed

General information
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation
Coughing, chest tightness, feeling of chest pressure. Vapors in high concentrations are anesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.

Ingestion
Contact with liquid form may cause frostbite. May cause nausea, headache, dizziness and intoxication.

Skin contact
Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Contact with liquid form may cause frostbite.

Eye contact
Severe irritation, burning and tearing. Irritation and redness, followed by blurred vision.

Indication of immediate medical attention and special treatment needed
Notes for the doctor
No specific recommendations. If in doubt, get medical attention promptly.

5. Fire-fighting measures

Extinguishing media
Suitable extinguishing media
The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

Special hazards arising from the substance or mixture
Specific hazards
Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapors. Aerosol containers can explode when heated, due to excessive pressure build-up.

Advice for firefighters
Protective actions during firefighting
Move containers from fire area if it can be done without risk. Bursting aerosol containers may be propelled from a fire at high speed.

Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions
Warn everybody of potential hazards and evacuate if necessary. Provide adequate ventilation. Avoid inhalation of vapors. Use approved respirator if air contamination is above an acceptable level.

Environmental precautions
Contain spillage with sand, earth or other suitable non-combustible material. Avoid release to the environment.

Methods and material for containment and cleaning up
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Methods for cleaning up
Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely.

Reference to other sections
For personal protection, see Section 8. For waste disposal, see section 13.

7. Handling and storage

Precautions for safe handling
Usage precautions
Provide adequate ventilation. Avoid inhalation of vapors/spray and contact with skin and eyes. In case of spills, beware of slippery floors and surfaces. Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapors. Keep out of the reach of children.

Conditions for safe storage, including any incompatibilities
Storage precautions
Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C.

Specific end use(s)
The identified uses for this product are detailed in Section 1.

Usage description
Lubricant.

Reference to other sections
Store away from incompatible materials (see Section 10).

8. Exposure Controls/personal protection

Control parameters
Occupational exposure limits
HFC-134a Tetrafluoroethane
Long-term exposure limit (8-hour TWA): OES 4240 mg/m³
Short-term exposure limit (15-minute): OES

PROPAN-2-OL
Long-term exposure limit (8-hour TWA): OSHA 400 ppm 980 mg/m³
Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 492 mg/m³
Short-term exposure limit (15-minute): ACGIH 400 ppm 984 mg/m³
A4

OSHA = Occupational Safety and Health Administration.
ACGIH = American Conference of Governmental Industrial Hygienists.
A4 = Not Classifiable as a Human Carcinogen.

Additional Occupational Exposure Limits

Ingredient comments
WEL = Workplace Exposure Limits

Exposure controls

Protective equipment
DGF14A - Duraglide Dry Lubricant, Aerosol

**Appropriate engineering controls**
No specific ventilation requirements. This product must not be handled in a confined space without adequate ventilation.

**Eye/face protection**
Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

**Hand protection**
Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Nitrile rubber. Polyvinyl alcohol (PVA). Viton rubber (fluoro rubber).

**Other skin and body protection**
Wear suitable protective clothing as protection against splashing or contamination. Wear apron or protective clothing in case of contact.

**Hygiene measures**
No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products. When using do not eat, drink or smoke.

**Respiratory protection**
Considering the size of the packaging, the risk is regarded as minimal. Vapors are heavier than air and may travel along the floor and accumulate in the bottom of containers. In confined or poorly-ventilated spaces, a supplied-air respirator must be worn. Wear self-contained breathing apparatus with full facepiece.

### 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
</tr>
<tr>
<td><strong>Color</strong></td>
</tr>
<tr>
<td><strong>Odor</strong></td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
</tr>
<tr>
<td><strong>pH</strong></td>
</tr>
<tr>
<td><strong>Melting point</strong></td>
</tr>
<tr>
<td><strong>Initial boiling point and range</strong></td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
</tr>
<tr>
<td><strong>Evaporation factor</strong></td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
</tr>
<tr>
<td><strong>Upper/lower flammability or explosive limits</strong></td>
</tr>
<tr>
<td><strong>Other flammability</strong></td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
</tr>
<tr>
<td><strong>Bulk density</strong></td>
</tr>
<tr>
<td><strong>Solubility(ies)</strong></td>
</tr>
<tr>
<td><strong>Partition coefficient</strong></td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Property</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decomposition Temperature</td>
<td>No information available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information available.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available.</td>
</tr>
<tr>
<td>Comments</td>
<td>Aerosol.</td>
</tr>
<tr>
<td>Refractive index</td>
<td>No information available.</td>
</tr>
<tr>
<td>Particle size</td>
<td>1-15 micron</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No information available.</td>
</tr>
<tr>
<td>Volatility</td>
<td>98.5%</td>
</tr>
<tr>
<td>Saturation concentration</td>
<td>No information available.</td>
</tr>
<tr>
<td>Critical temperature</td>
<td>No information available.</td>
</tr>
<tr>
<td>Volatile organic compound</td>
<td>No information available.</td>
</tr>
<tr>
<td>Flammability</td>
<td>The product is not flammable.</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>There are no known reactivity hazards associated with this product.</td>
</tr>
<tr>
<td>Stability</td>
<td>Stable at normal ambient temperatures and when used as recommended.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Will not polymerize.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapors.</td>
</tr>
<tr>
<td>Materials to avoid</td>
<td>Alkali metals. Alkaline earth metals. Powdered metal.</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Heating may generate the following products: Toxic and corrosive gases or vapors. Halogenated hydrocarbons. Hydrogen fluoride (HF). Carbon dioxide (CO2). Carbon monoxide (CO).</td>
</tr>
</tbody>
</table>

11. Toxicological information

Information on toxicological effects

<table>
<thead>
<tr>
<th>Property</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other health effects</td>
<td>There is no evidence that the product can cause cancer.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Vapors may irritate throat/respiratory system. A single exposure may cause the following adverse effects: Coughing. Difficulty in breathing.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>Product has a defatting effect on skin. May cause allergic contact eczema.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>May cause temporary eye irritation.</td>
</tr>
<tr>
<td>Medical Symptoms</td>
<td>Gas or vapor in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Headache. Fatigue. Nausea, vomiting.</td>
</tr>
</tbody>
</table>

Toxicological information on ingredients.
Other health effects
There is no evidence that the product can cause cancer.

Acute toxicity - inhalation
Acute toxicity inhalation (LC₅₀ gases ppmV) 567,000.0
Species Rat
ATE inhalation (gases ppm) 567,000.0

Acute toxicity - oral
Acute toxicity oral (LD₅₀ mg/kg) 5,800.0
Species Rat
ATE oral (mg/kg) 5,800.0

Acute toxicity - dermal
Acute toxicity dermal (LD₅₀ mg/kg) 13,000.0
Species Rabbit
ATE dermal (mg/kg) 13,000.0

Acute toxicity - inhalation
Acute toxicity inhalation (LC₅₀ vapours mg/l) 16,000.0
Species Rat
ATE inhalation (vapours mg/l) 16,000.0

Carcinogenicity
IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.
NTP carcinogenicity Not listed.
OSHA Carcinogenicity Not listed.

Ecological Information
The product contains a substance or substances that will contribute to global warming (greenhouse effect).

Acute toxicity - fish LC₅₀, 96 hours: 450 mg/L mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 980 mg/L mg/l, Daphnia magna

Ecological information on ingredients.
DGF14A - Duraglide Dry Lubricant, Aerosol

Acute toxicity - fish
LC₅₀, 96 hours: 450 mg/l, Fish

Acute toxicity - aquatic invertebrates
EC₅₀, 48 hours: 980 mg/l, Daphnia magna

PROPAN-2-OL

Acute toxicity - fish
LC₅₀, 96 hours: 9,640 mg/l, Fish

Acute toxicity - aquatic invertebrates
EC₅₀, 48 hours: 5102 mg/l, Daphnia magna

Acute toxicity - aquatic plants
IC₅₀, 72 hours: >2,000 mg/l, Algae

Persistence and degradability
The product is not expected to be biodegradable.

Bioaccumulative potential
Bio-Accumulative Potential
No data available on bioaccumulation.

Partition coefficient
No information available.

Ecological information on ingredients.

HFC-134a Tetrafluoroethane

Partition coefficient
Pow: 1.06

PROPAN-2-OL

Partition coefficient
: 0.05

Mobility in soil
Mobility
The product contains volatile substances which may spread in the atmosphere.

Other adverse effects
Other adverse effects
The product contains a substance or substances that will contribute to global warming (greenhouse effect).

13. Disposal considerations

Waste treatment methods

General information
Reuse or recycle products wherever possible. Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods
Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Empty containers must not be punctured or incinerated because of the risk of an explosion. Aerosol containers can explode when heated, due to excessive pressure build-up. Reuse or recycle products wherever possible.

14. Transport information

UN Number
UN No. (IMDG) 1950
UN No. (ICAO) 1950
DGF14A - Duraglide Dry Lubricant, Aerosol

UN proper shipping name
Proper shipping name (TDG) LIMITED QUANTITY
Proper shipping name (IMDG) UN1950, Aerosols, Non-Flammable, 2.2, Limited Quantity
Proper shipping name (ICAO) UN1950, Aerosols, Non-Flammable, 2.2, Limited Quantity
Proper shipping name (DOT) LIMITED QUANTITY

Transport hazard class(es)
IMDG Class 2.2
ICAO class/division 2.2
ICAO subsidiary risk N/A

Packing group
TDG Packing Group N/A
IMDG packing group N/A
ICAO packing group N/A
DOT packing group N/A

Environmental hazards
Environmentally Hazardous Substance No.

Special precautions for user
Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not relevant. No information required.

15. Regulatory information

US Federal Regulations
SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities Not listed.
CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA) Not listed.
SARA Extremely Hazardous Substances EPCRA Reportable Quantities Not listed.
SARA 313 Emission Reporting Not listed.
CAA Accidental Release Prevention Not listed.
SARA (311/312) Hazard Categories
Acute
Chronic
Pressure
DGF14A - Duraglide Dry Lubricant, Aerosol

OSHA  Highly Hazardous Chemicals
Not listed.

US State Regulations
California Proposition 65 Carcinogens and Reproductive Toxins
Not listed.

California Air Toxics "Hot Spots" (A-I)
PROPAN-2-OL
Present.

California Air Toxics "Hot Spots" (A-II)
Not listed.

California Directors List of Hazardous Substances
PROPAN-2-OL
Present.

Massachusetts "Right To Know" List
PROPAN-2-OL
Present.

Rhode Island "Right To Know" List
PROPAN-2-OL
Present.

Minnesota "Right To Know" List
HFC-134a Tetrafluoroethane
Present.
PROPAN-2-OL
Present.

New Jersey "Right To Know" List
PROPAN-2-OL
Present.

Pennsylvania "Right To Know" List
PROPAN-2-OL
Present.

Inventories
Canada - DSL/NDSL
DSL

US - TSCA
All the ingredients are listed.

16. Other information

Revision comments  NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date  6/23/2017
## DGF14A - Duraglide Dry Lubricant, Aerosol

<table>
<thead>
<tr>
<th>Revision</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supersedes date</td>
<td>4/11/2017</td>
</tr>
<tr>
<td>SDS No.</td>
<td>AEROSOL - DGF14A</td>
</tr>
<tr>
<td>SDS status</td>
<td>Approved.</td>
</tr>
<tr>
<td>Hazard statements in full</td>
<td></td>
</tr>
<tr>
<td>H225 Highly flammable liquid and vapor.</td>
<td></td>
</tr>
<tr>
<td>H280 Contains gas under pressure; may explode if heated.</td>
<td></td>
</tr>
<tr>
<td>H319 Causes serious eye irritation.</td>
<td></td>
</tr>
<tr>
<td>H336 May cause drowsiness or dizziness.</td>
<td></td>
</tr>
</tbody>
</table>

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.