



Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 01.09.2015 Version number 1 Revision: 01.09.2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: ANTI-FOG GEL

1.2 Relevant identified uses of the substance or mixture and uses advised against

Application of the substance / the preparation: Application of Anti-fog properties to lenses.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

HilcoVision, 33 West Bacon St., Plainville, MA 02762 USA

US & Canada 508-699-4406

UK: 44-4969--667688

1.4 Emergency telephone number:

INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to

Regulation (EC) No 1272/2008

This product is not classified as hazardous according to Regulation (EC) No 1272/2008.

2.2 Label elements Labelling according to Regulation (EC) No 1272/2008: Not applicable. Hazard pictograms:

Not applicable. Signal word: Not applicable. Hazard statements: Not applicable.

2.3 Other hazards

Results of PBT and vPvB assessment PBT: No PBT. vPvB: No vPvB.

SECTION 3: Composition/information on ingredients

3.2 Mixtures Description: Mixture consisting of the following components.

Hazardous components:		
CAS: 76-37-9 EINECS: 200-955-5	2,2,3,3-tetrafluoropropan-1-ol Flam. Liq. 3, H226; Acute Tox. 3, H331; Eye Irrit. 2, H319	0.1-<5 %
CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0	Propan-2-ol Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	0.1-<5 %
Non-hazardous components:		

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Non-hazardous components:		
CAS: 69991-67-9	1-Propene, 1,1,2,3,3,3-hexafluoro-, oxidized, polymd.	2.5-<10%

Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures **After inhalation:** Move patient to fresh air, if symptoms persist consult a doctor. **After skin contact:** Wash with water and soap and rinse thoroughly. **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:
Rinse out mouth and then drink plenty of water. If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released: Carbon monoxide (CO)

5.3 Advice for firefighters

Protective equipment:

Fire fighters should wear full protective clothing and self-contained breathing apparatus in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Keep away from ignition sources.

6.2 Environmental precautions

 No special measures required.

6.3 Methods and material for containment and cleaning up

Retrieve the product by mechanical means. Dispose contaminated material as waste according to item 13.

6.4 Reference to other sections

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling Ensure good ventilation/exhaustion at the workplace. **Information about fire -and explosion protection:** No special measures required.

7.2 Conditions for safe storage, including any incompatibilities Requirements to be met by storerooms and receptacles:

Store in a cool, dry place in tightly closed receptacles. **Information about storage in one common storage facility:** Not required.

7.3 Specific end use(s): No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Hazardous components:		
CAS: 76-37-9 EINECS: 200-955-5	2,2,3,3-tetrafluoropropan-1-ol Flam. Liq. 3, H226; Acute Tox. 3, H331; Eye Irrit. 2, H319	0.1-<5 %
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Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls Personal protective equipment General protective and hygienic measures:

Wash hands before breaks and at the end of work. Keep away from foodstuffs, beverages and feed. **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation. **Protection of hands:** Wear protective gloves if prolonged or repeated contact is likely. **Eye protection:** Use safety glasses if potential for eye contact exists. **Body protection:** Protective work clothing.

SECTION 9: Physical and chemical properties

9.1 Hazardous components:		Information on basic physical and chemical properties
CAS: 76-37-9 EINECS: 200-955-5	2,2,3,3-tetrafluoropropan-1-ol Flam. Liq. 3, H226; Acute Tox. 3, H331; Eye Irrit. 2, H319	
CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0	Propan-2-ol Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	
Non-hazardous components:		
CAS: 69991-67-9	1-Propene, 1,1,2,3,3,3-hexafluoro-, oxidized, polymd.	
CAS: 8012-95-1 EINECS: 232-384-2	Paraffin oils	
CAS: 60164-51-4	perfluoralkylether	
CAS: 7732-18-5 EINECS: 231-791-2	water	
Ingredients with limit values that require monitoring at the workplace:		
67-63-0 Propan-2-ol		
WEL (Great Britain)	Short-term value: 1250 mg/m ³ , 500 ppm Long-term value: 999 mg/m ³ , 400 ppm	

General Information

Appearance:

Form: Paste.
Colour: Light blue
Odour threshold: Not determined.

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Upper: Not determined. **Oxidising properties** None. **Vapour pressure:** Not determined. **Density:** Not determined. **Relative density** Not determined. **Vapour density** Not determined. **Evaporation rate** Not determined. **Solubility in / Miscibility with**

Water: Not determined. **Partition coefficient (n-octanol/water):** log Pow: 0.05 (67-63-0 propan-2-ol)
Viscosity:

Dynamic: Not determined.

Kinematic: Not determined.

9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity No data available.

10.2 Chemical stability Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid Keep away from heat and direct sunlight.

10.5 Incompatible materials No further relevant information available.

10.6 Hazardous decomposition products No further relevant information available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects Acute toxicity

Primary irritant effect: Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): Germ cell mutagenicity:

Hazardous components:		
CAS: 76-37-9 EINECS: 200-955-5	2,2,3,3-tetrafluoropropan-1-ol Flam. Liq. 3, H226; Acute Tox. 3, H331; Eye Irrit. 2, H319	0.1-<5 %
CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0	Propan-2-ol Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	0.1-<5 %
Non-hazardous components:		
CAS: 69991-67-9	1-Propene, 1,1,2,3,3,3-hexafluoro-, oxidized, polymd.	2.5-<10%
CAS: 8012-95-1	Paraffin oils	0.1-<2.5

Based on available data, the classification criteria are not met. **Carcinogenicity:** Based on available data, the classification criteria are not met. **Reproductive toxicity:** Based on available data, the classification criteria are not met. **STOT-single exposure:** Based on available data, the classification criteria are not met. **STOT-repeated exposure:** Based on available data, the classification criteria are not met.

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

SECTION 12: Ecological information

Hazardous components:		
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CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0	Propan-2-ol Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	0.1-<5 %

12.1 Toxicity

12.2 Persistence and degradability

67-63-0 propan-2-ol Readily biodegradable

12.3 Bioaccumulative potential

67-63-0 propan-2-ol Does not accumulate in organisms

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment **PBT:** No PBT. **vPvB:** No vPvB.

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods Recommendation: Smaller quantities can be disposed of with household waste.

Uncleaned packaging Recommendation:

Disposal must be made according to official regulations. Packaging that may not be cleansed must be disposed of in the same manner as the product.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 14: Transport information

Hazardous components:	
CAS: 76-37-9 EINECS: 200-955-5	2,2,3,3-tetrafluoropropan-1-ol Flam. Liq. 3, H226; Acute Tox. 3, H331; Eye
CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0	Propan-2-ol Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT
Non-hazardous components:	
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SECTION 15: Regulatory information

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

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H319 Causes serious eye irritation. H331 Toxic if inhaled. H336 May cause drowsiness or dizziness.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent Flam. Liq. 2: Flammable liquids, Hazard Category 2 Flam. Liq. 3: Flammable liquids, Hazard Category 3 Acute Tox. 3: Acute toxicity, Hazard Category 3 Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2 STOT SE 3: Specific target organ toxicity -Single exposure, Hazard Category 3