



ZEISS Lens Cleaner

SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200) - GHS Classification

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

GHS Product Identifier Not applicable.
Chemical Name Not applicable.
Trade name Ultra Clarity[®] Lens Cleaner
CAS No. Mixture

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

Identified use(s) Optics cleaner solution
Uses advised against None.

Details of the supplier of the safety data sheet

Company Identification Nanofilm Ltd
Telephone +1 (800) 883-6266
Fax +1 (216) 447-1137
E-Mail (competent person) info@nanofilmtechnology.com

Emergency telephone number

Emergency Phone No. CHEMTREC 24 hr. (800) 424-9300 or
+1 (703) 527-3887 (Collect call accepted)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200) - GHS Classification Not classified as dangerous for supply/use.

Label elements

Hazard Symbol None

Other hazards

None

Additional Information

None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Hazardous ingredient(s)	%W/W	CAS No.	Hazard statement(s)
Isopropyl Alcohol	4-6	67-63-0	Flammable liquid. Irritating to eyes. May be harmful if swallowed.
Water	>94	7732-18-5	None anticipated
Other*	---	---	-----

*Ingredients present at <0.1%

Additional Information - None

SECTION 4: FIRST AID MEASURES

**Description of first aid measures**

Inhalation If symptoms occur, obtain medical attention.
Skin Contact Wash skin with water. If symptoms occur, obtain medical attention.

Eye Contact

If substance has got into the eyes, wash out with water. If symptoms occur, obtain medical attention.

Ingestion

Drink one glass of water. Do not induce vomiting. If symptoms occur obtain medical attention.

Most important symptoms and effects, both acute and delayed

May cause eye irritation.

Indication of the immediate medical attention and special treatment needed

None

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Non-combustible

Unsuitable Extinguishing Media

None anticipated.

Special hazards arising from the substance or mixture

Non-combustible

Advice for fire-fighters

As appropriate for surrounding fire.
>90% Water - Will not support combustion

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Not normally required.

Environmental precautions

Not normally required.

Methods and material for containment and cleaning up

Contain and cover spilled substance with dry sand or earth or other suitable dry material. Transfer to a container for disposal or recovery. Provide adequate ventilation.

Reference to other sections

None

Additional Information

None.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Wash affected skin with plenty of water. Remove contaminated clothing and wash clothing before reuse. Provide adequate ventilation. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

Storage Temperature

Store at room temperature.

Incompatible materials

None

Specific end use(s)

Optics cleaner solution

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational Exposure Limits

SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)		STEL (ppm)		Note:
		PEL (OSHA)	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	
Isopropyl alcohol	67-63-0	400	200	----	400	----

- LTEL: Long Term Exposure Limit; - STEL: Short Term Exposure Limit

Recommended monitoring method

NIOSH 1400

Exposure controls

Appropriate engineering controls

Not normally required.

Personal protection equipment

Eye/face protection



Not required under normal consumer use.
Industrial use: Safety spectacles

Skin protection (Hand protection/ Other)



Not required under normal consumer use.
Industrial use: Wear suitable gloves if prolonged skin contact is likely.

Respiratory protection



Not required under normal consumer use.
Industrial use: In case of inadequate ventilation wear respiratory protection.

Thermal hazards

Not normally required.

Environmental Exposure Controls

Not normally required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid
Colour	Greenish. Blue.
Odour	Not available.
Odour Threshold (ppm)	Not available.
pH (Value)	7
Melting Point (°C) / Freezing Point (°C)	Not available.
Boiling point/boiling range (°C):	Not determined.
Flash Point (°C)	51 (124 °F) Pensky-Martens closed cup >90% Water - Will not support combustion
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Explosive limit ranges	Not available.
Vapour Pressure (Pascal)	Not available.
Vapour Density (Air=1)	Not available.
Density (g/ml)	Not available.
Specific Gravity	0.95 @ 22°C
Solubility (Water)	Soluble
Solubility (Other)	Not known
Partition Coefficient (n-Octanol/water)	Not available.
Auto Ignition Temperature (°C)	Not available.
Decomposition Temperature (°C)	Not available.
Kinematic Viscosity (mPa.s) @ 22°C	<10
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
Other information	Not available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions.

Chemical stability

Stable.

Possibility of hazardous reactions	None anticipated.
Conditions to avoid	Heat.
Incompatible materials	None
Hazardous Decomposition Product(s)	Carbon monoxide

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Substances	Not applicable
Mixtures	
Acute toxicity	Not available.
Irritation	Not available.
Corrosivity	Not available.
Sensitisation	Not available.
Repeated dose toxicity	Not available.
Carcinogenicity	IARC, NTP, OSHA, ACGIH do not list this product or any components thereof as known or suspected carcinogen.
Mutagenicity	Not available.
Toxicity for reproduction	Not available.

Substances in preparations / mixtures

Isopropyl Alcohol (CAS No.67-63-0)

Acute toxicity	Oral: LD50 = 5.84 g/kg (rat) Inhalation: LC50 > 1000 ppm (rat) 6 hour(s) Dermal: LD50 = 16.4 ml/kg (rabbit) 24 hour(s)
Irritant	Irritating to eyes.
Sensitisation	It is not a skin sensitizer.
Repeated dose toxicity	NOAEL = 5,000 ppm (Inhalation)
Other information	None known.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Substances in preparations / mixtures

Isopropyl Alcohol (CAS No.67-63-0)

Biodegradability	Biodegradable
Bioaccumulative potential	The product has no potential for bioaccumulation.
Acute toxicity	LC50(96 hour): 10,000 mg/l (Fathead minnow (<i>Pimephales promelas</i>)) LC50 24hour(s): >10,000 mg/l (<i>Daphnia magna</i>)
Long Term Toxicity	NOEC: 3.37 µmol/l (<i>Daphnia magna</i>) (Growth rate)
Persistence and degradability	The organic part of the product is biodegradable.
Bioaccumulative potential	The product has no potential for bioaccumulation.
Mobility in soil	The product has high mobility in soil.
Results of PBT and vPvB assessment	Not classified as PBT or vPvB.
Other adverse effects	None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods	Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.
Additional Information	None known.

SECTION 14: TRANSPORT INFORMATION

In accordance with: 49CFR 173.120(a)(5); ADR Annex A 2.2.3.1.1 Note 1; ICAO 2.3.1.3(c); IATA DGR 3.3.1.3(c); and IMO 2.3.1.3.3

DOT (DEPARTMENT OF TRANSPORTATION)

Not classified as dangerous for transport.

UN number
 Proper Shipping Name
 Transport hazard class(es)
 Packing Group
 Hazard label(s)
 Environmental hazards
 Special precautions for user

Land transport (ADR/RID)

Not classified as dangerous for transport.

UN number
 Proper Shipping Name
 Transport hazard class(es)
 Packing Group
 Hazard label(s)
 Environmental hazards
 Special precautions for user

Sea transport (IMDG)

Not classified as dangerous for transport.

UN number
 Proper Shipping Name
 Transport hazard class(es)
 Packing Group
 Marine Pollutant
 Special precautions for user

Air transport (ICAO/IATA)

Not classified as dangerous for transport.

UN number
 Proper Shipping Name
 Transport hazard class(es)
 Packing Group
 Environmental hazards
 Special precautions for user

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION**Safety, health and environmental regulations/legislation specific for the substance or mixture:**

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

RCRA Hazardous Waste Number (40 CFR 261.33): None

US RCRA Hazard Class: None

SARA 311/312 - Hazard Categories: None

Fire Sudden Release Reactivity Immediate (acute) Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372): None

SARA 302 - Extremely Hazardous Substances: None



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SECTION 16: OTHER INFORMATION

Additional Information

None

The following sections contain revisions or new statements: 2

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