

Material Safety Data Sheet

Ultra Clarity® Lens Towelette

Date of Preparation: 28-Nov-2006

Revision: 002

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Ultra Clarity® Lens Towelette

Chemical Formula: Proprietary

General Use: Optics cleaning

Manufacturer: Nanofilm, 10111 Sweet Valley Dr., Valley View, OH 44125, Phone (800) 883-6266, FAX (216) 447-1137 (8:30 AM – 5:30 PM),

(Emergency phone number: CHEMTREC (800) 424-9300, International: (703) 527-3887)

Section 2 - Composition / Information on Ingredients

Hazardous Ingredients	CAS Number	% wt
2-Propanol	67-63-0	<30

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
2-Propanol	(400) ppm; (500) ppm STEL	400 ppm TWA; 980 mg/m ³ TWA 2000 ppm IDLH (10 percent lower explosive limit)	400 ppm TWA; 980 mg/m ³ TWA

Section 3 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Appearance: Premoistened towelette. **FLAMMABLE** Flash Point of liquid: 27.8°C (82°F)
(There is no free liquid in the towelette. Each towelette is in an air-tight pouch.)

HMIS

H: 1

F: 3

R: 0

PPE¹

¹Sec. 8

Potential Health Effects

Route of Entry: Oral, skin, eye

Effects of Acute Exposure to Product: Normal use causes no effect.

Effects of Chronic Exposure to Product: May irritate eyes, skin and throat. Prolonged contact with product may aggravate pre-existing dermatitis, eye contact may cause irritation or redness in eye, ingestion may produce stomach cramps or diarrhea.

Toxicity Information: Not available

Section 4 - First Aid Measures

Inhalation: Drink one glass of cold water, move to fresh air

Eye Contact: Wash eyes with cold water

Skin Contact: Wash skin with cold water.

Ingestion: Drink 1-2 glasses of cold water, if any discomfort prolongs consult physician

Section 5 - Fire-Fighting Measures

Flash Point of liquid in towelette: 27.8 °C (82°F)
Autoignition Temperature: NA
LEL: NA
UEL: NA



Extinguishing Media: Carbon dioxide, water, dry chemicals, foam
Special Fire Fighting Procedure: Self-contained breathing apparatus and protective clothing
Hazardous Combustion Products: Carbon monoxide and unidentified organic compounds
Unusual Fire and Explosion Hazards: None

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Steps to be taken in case of spill or leaks: Not applicable – no free liquid.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation.
Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.
OSHA Vacated PELs: 2-Propanol: 400 ppm TWA; 980 mg/m³ TWA
Personal Protective Equipment
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: premoistened towelette	Water Solubility: NA
Appearance and Odor: premoistened towelette	Boiling Point: NA
Vapor Pressure: NA	Freezing/Melting Point: NA
Vapor Density (Air=1): NA	Evaporation Rate: NA
Specific Gravity (H₂O=1, at 4 °C): NA	Viscosity: NA
PH of liquid: 7	

Section 10 - Stability and Reactivity

Stability: Stable
Conditions to Avoid: Extreme heat and open flame
Incompatibility (Materials to Avoid): None
Hazardous Decomposition Products: Carbon monoxide
Hazardous Polymerization: Will not occur

Section 11- Toxicological Information

Pertaining to 2-Propanol only:**RTECS#:**

CAS# 67-63-0: NT8050000

LD50/LC50:

CAS# 67-63-0:

Oral, mouse: LD50 = 3600 mg/kg;

Oral, rabbit: LD50 = 6410 mg/kg;

Oral, rat: LD50 = 5045 mg/kg;

Skin, rabbit: LD50 = 12800 mg/kg; <BR.

Carcinogenicity:

CAS# 67-63-0:

IARC: Group 3 carcinogen**Epidemiology:** Experimental teratogenic and reproductive effects have been reported for isopropanol. Early epidemiological studies have suggested an association between the strong acid manufacture of isopropyl alcohol and paranasal sinus cancer in workers.**Teratogenicity:** Oral, rat: TDLo = 8 gm/kg (female 6-15 day(s) after conception) Effects on Embryo or Fetus - fetotoxicity; Oral, rat: TDLo = 32400 ug/kg (female 26 week(s) pre-mating) Effects on Embryo or Fetus - fetal death; Inhalation, rat: TCLo = 7000 ppm/7H (female 1-19 day(s) after conception) Specific Developmental Abnormalities - musculoskeletal system.**Reproductive Effects:** Oral, rat: TDLo = 11340 mg/kg (female 45 day(s) pre-mating) Maternal Effects - menstrual cycle changes or disorders. Oral, rat: TDLo = 5040 mg/kg (female 1-20 day(s) after conception) Fertility - litter size (e.g. # fetuses per litter; measured before birth).**Neurotoxicity:** No information available.**Mutagenicity:** Cytogenetic analysis: Inhalation, rat = 1030 ug/m³/16W (Intermittent).**Other Studies:** Standard Draize Test: Administration onto the skin (rabbit) = 500 mg (Mild). Standard Draize Test: Administration into the eye (rabbit) = 100 mg (Moderate). Standard Draize Test: Administration into the eye = 10 mg (Moderate). Standard D raize test: Administration into the eye (rabbit) = 100 mg/24 H (Moderate).

Section 12 - Ecological Information

Ecotoxicity: Not available.**Environmental Fate:** Not available.**Physical/Chemical:** Not available.**Other:** None.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.**RCRA U-Series:** None listed.

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

Shipping Name: NA
Shipping Symbols: NA
Hazard Class: NA
ID No.: NA
Packing Group: NA
Label: NA
Special Provisions: NA

Packaging Authorizations
 a) **Exceptions:** NA
 b) **Non-bulk Packaging:** NA
 c) **Bulk Packaging:** NA

Quantity Limitations
 a) **Passenger, Aircraft, or Railcar:** NA
 b) **Cargo Aircraft Only:** NA
 c) **Limited quantities:** NA

Vessel Stowage Requirements
 a) **Vessel Stowage:** NA
 b) **Other:** NA

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 67-63-0 is listed on the TSCA inventory.

Health & Safety Reporting List

CAS# 67-63-0: Effective Date: December 15, 1986; Sunset Date: December 15, 1996

Chemical Test Rules

CAS# 67-63-0: Testing required by: manufacturers; importers; processors

Section 12b

CAS# 67-63-0: 4/12b

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)

None of the chemicals in this material have an RQ.

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 67-63-0: acute, chronic, flammable.

Section 313

This material contains 2-Propanol (CAS# 67-63-0), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 67-63-0 can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

F

Risk Phrases:

R 11 Flammable.

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking. S 33 Take precautionary measures against static discharges. S 7 Keep container tightly closed. S 9 Keep container in a well-ventilated place.

WGK (Water Danger/Protection)

CAS# 67-63-0: 1

Canada

CAS# 67-63-0 is listed on Canada's DSL/NDSL List.

This product has a WHMIS classification of B2, D2B.

CAS# 67-63-0 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 67-63-0: OEL-AUSTRALIA: TWA 400 ppm (980 mg/m³); STEL 500 ppm (1225 mg/m³) OEL-BELGIUM: TWA 400 ppm (985 mg/m³); STEL 500 ppm (1230 mg/m³) OEL-DENMARK: TWA 200 ppm (490 mg/m³); Skin OEL-FRANCE: STEL 400 ppm (980 mg/m³) OEL-GERMANY: TWA 400 ppm (980 mg/m³) OEL-JAPAN: STEL 400 ppm (980 mg/m³) OEL-THE NETHERLANDS: TWA 400 ppm (980 mg/m³); Skin OEL-THE PHILIPPINES: TWA 400 ppm (980 mg/m³) OEL-RUSSIA: STEL 400 ppm (10 mg/m³) OEL-SWEDEN: TWA 150 ppm (350 mg/m³); STEL 250 ppm (600 mg/m³) OEL-SWITZERLAND: TWA 400 ppm (980 mg/m³); STEL 800 ppm OEL-TURKEY: TWA 200 ppm (500 mg/m³) OEL-UNITED KINGDOM: TWA 400 ppm (980 mg/m³); STEL 500 ppm; Skin OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

Section 16 - Other Information

Prepared By: Vice President, Technology

Revision Notes: 28-Nov-2006

Replace Issue 001 dated 20-Feb-2003.

Additional Hazard Rating Systems: N/A

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