Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 03/21/2019 Version: 1.0

SECTION 1: Identification

Identification

Product form : Mixture

Product name : TECH SPEC LENS CLEANER

Product code : 850771

Recommended use and restrictions on use

Recommended use : LENS CLEANER

Supplier

Edmund Optics, Inc. 101 East Gloucester Pike Barrington, NJ 08007 - USA

T 856.547.3488

Emergency telephone number

No additional information available

SECTION 2: Hazard(s) identification

Classification of the substance or mixture

GHS-US classification

Flammable liquids Category 3 Flammable liquid and vapour Serious eye damage/eye irritation Category Causes serious eye irritation

2A

Specific target organ toxicity (single exposure) May cause drowsiness or dizziness Category 3

GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)





Signal word (GHS US): Warning

Hazard statements (GHS US): Flammable liquid and vapour Causes serious eye irritation

May cause drowsiness or dizziness

Precautionary statements (GHS US)

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, lighting, ventilating equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist, vapors. Wash hands thoroughly after handling. Use only in a well-ventilated area. Wear eye

protection, protective gloves.

Response: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

03/21/2019 EN (English US) Page 1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Continue rinsing. Call a doctor, a POISON CENTER if you feel unwell. If eye irritation persists: Get medical advice/attention. In case of fire: Use Suitable

extinguishing media to extinguish.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store in a

well-ventilated place. Keep cool. Store locked up.

Disposal: Dispose of contents/container to hazardous or special waste collection

point, in accordance with local, regional, national and/or international

regulation

Other hazards which do not result in classification

Other hazards not contributing to the classification

: Do not freeze. Keep out of the reach of children. Repeated exposure may

cause skin dryness or cracking.

Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

Name	Product identifier	Weight (%)
2-Propanol	(CAS-No.) 67-63-0	5 - 10
2-Butoxyethanol	(CAS-No.) 111-76-2	1 - 5

SECTION 4: First-aid measures

Description of first aid measures

First-aid measures general : Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. Remove/Take off immediately all

contaminated clothing.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if

sent and easy to do. Continue rinsing. If eye irritation persists: Get medical

ce/attention.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

Most important symptoms and effects (acute and delayed)

Symptoms/effects : May cause drowsiness or dizziness, Dizziness, headaches, nausea.

Symptoms/effects after skin contact : Repeated exposure may cause skin dryness or cracking. Symptoms/effects after eye contact : Eye irritation. redness, itching, tears. stinging. Blurred vision.

Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water fog. Foam. Dry powder. Carbon dioxide.

Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread.

Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapour. May form an explosive mixture in the

presence of air. Vapour could travel to source of ignition and flash back.

Reactivity : Flammable liquid and vapour.

03/21/2019 EN (English US) 2/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-

contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid

breathing mist, vapours. Avoid contact with skin and eyes. Eliminate all

ignition sources.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For

further information refer to section 8: "Exposure controls/personal

protection".

Emergency procedures : Take precautionary measures against static discharge. Keep away from

combustible material.

Environmental precautions

Avoid release to the environment.

Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product

enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only in a well-ventilated area. Avoid breathing mist, vapors. Avoid contact with

skin and eyes. Protect from sunlight. Do not mix with other chemicals.

Do not eat, drink or smoke when using this product. Always wash hands

after handling the product.

Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed.

Store locked up. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container closed when not in use. Protect from sunlight. Prevent the build-up of electrostatic charge. Do

not freeze. Keep out of the reach of children.

SECTION 8: Exposure controls/personal protection

Control parameters

Hygiene measures

03/21/2019 EN (English US) 3/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2-Propanol (67-63-0)		
ACGIH	Local name	2-Propanol
ACGIH	ACGIH TWA (ppm)	200 ppm
ACGIH	ACGIH STEL (ppm)	400 ppm
ACGIH	Remark (ACGIH)	TLV® Basis: Eye & URT irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m³)	980 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	400 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
2-Butoxyethanol (111-76-2)		
ACGIH	Local name	2-Butoxyethanol (EGBE)
ACGIH	ACGIH TWA (ppm)	20 ppm
ACGIH	Remark (ACGIH)	TLV® Basis: Eye & URT irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m³)	240 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	50 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Use engineering controls to

keep exposures below the OEL or DNEL. Eyewash station.

Environmental exposure controls : Avoid release to the environment.

Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

No respiratory protection needed under normal use conditions. If the occupational exposure limit is exceeded: Wear respiratory protection.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state : Liquid

03/21/2019 EN (English US) 4/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Appearance : clear.

: Blue : alcohol

Odor threshold : No data available

pH : 7-8

Melting point : Not applicable
Freezing point : No data available

Boiling point : 192 °F Flash point : 98 °F

Relative evaporation rate (butyl : No data available

acetate=1)

Flammability (solid, gas) : Not applicable.

Vapor pressure : 18 mm Hg at 20°C

Relative vapor density at 20 °C : No data available

Relative density : No data available

Specific gravity / density : 0.98

Solubility Water: 100 % Log Pow No data available Auto-ignition temperature No data available Decomposition temperature No data available Viscosity, kinematic No data available Viscosity, dynamic No data available **Explosion limits** No data available Explosive properties No data available No data available Oxidizing properties

VOC content : 11.15 % Less Exempts and Water

SECTION 10: Stability and reactivity

Reactivity

Flammable liquid and vapour.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

Incompatible materials

Strong oxidizing agents. Isocyanates. chlorine.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

03/21/2019 EN (English US) 5/9

Safety Data Sheet

Acute toxicity (dermal)

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Acute toxicity (inhalation) : Not classified		
ATE US (oral)	> 5000 mg/kg	
ATE US (dermal)	> 5000 mg/kg	
ATE US (gases)	>20,000 ppm/4h	
ATE US (vapors)	25 mg/l/4h	
ATE US (dust, mist)	>5 mg/l/4h	

Skin corrosion/irritation : PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE

IRRITATION

: Not classified

pH: 7 - 8

Serious eye damage/irritation : Causes serious eye irritation.

pH: 7 - 8

Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

2-Propanol	(67-63-0)

IARC group 3 - Not classifiable

2-Butoxyethanol (111-76-2)

IARC group 3 - Not classifiable

Reproductive toxicity : Not classified

Specific target organ toxicity – single

exposure

: May cause drowsiness or dizziness.

Specific target organ toxicity –

repeated exposure

: Not classified

Aspiration hazard : Not classified Viscosity, kinematic : No data available

Symptoms/effects : May cause drowsiness or dizziness. Dizziness, headaches, nausea.

Symptoms/effects after skin contact : Repeated exposure may cause skin dryness or cracking. Symptoms/effects after eye contact : Eye irritation. redness, itching, tears. stinging. Blurred vision.

SECTION 12: Ecological information

Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Persistence and degradability

2-Propanol (67-63-0)	
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.19 g O₂/g substance
Chemical oxygen demand (COD)	2.23 g O₂/g substance

03/21/2019 EN (English US) 6/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ThOD	2.4 g O₂/g substance
2-Butoxyethanol (111-76-2)	
Persistence and degradability	Readily biodegradable in water.

Bioaccumulative potential

2-Propanol (67-63-0)		
Log Pow	0.05 (Weight of evidence approach, 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
2-Butoxyethanol (111-76-2)		
Log Pow	0.81 (Test data, 20 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	

Mobility in soil

2-Propanol (67-63-0)		
Surface tension	0.021 N/m (25 °C)	
Log Koc	0.185 - 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	
Ecology - soil	Highly mobile in soil.	
2-Butoxyethanol (111-76-2)		
Surface tension	65.03 mN/m (20 °C, 2 g/l)	
Ecology - soil	Low potential for adsorption in soil.	

Other adverse effects

No additional information available

SECTION 13: Disposal considerations

Disposal methods

Waste treatment methods : This material and its container must be disposed of as hazardous waste.

Dispose of in accordance with relevant local regulations. Do not allow to

enter into surface water or drains.

Additional information : Flammable vapors may accumulate in the container.

SECTION 14: Transport information

US - DOT

Proper Shipping Name (DOT) : Flammable liquids, n.o.s. (ISOPROPYL ALCOHOL)

UN-No.(DOT) : UN1993

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Packing group (DOT) : III - Minor Danger Hazard labels (DOT) : Flammable liquid

International shipping - IMDG

Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, N.O.S. (ISOPROPYL ALCOHOL)

UN-No. (IMDG) : 1993

03/21/2019 EN (English US) 7/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Class (IMDG) : Flammable liquids

International - IATA

Proper Shipping Name (IATA) : Flammable liquid, n.o.s. (ISOPROPYL ALCOHOL)

UN-No. (IATA) : 1993

Proper Shipping Name (IATA) : Flammable liquid, n.o.s.

Class (IATA) : 3 - Flammable Liquids

Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Isopropanol	CAS-No. 67-63-0	5 - 10%
Isoproparior	CA3-NO. 07-03-0	3 - 1070

15.2. International regulations

CANADA

2-Propanol (67-63-0)

Listed on the Canadian DSL (Domestic Substances List)

2-Butoxyethanol (111-76-2)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

2-Butoxyethanol (111-76-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

2-Butoxyethanol (111-76-2)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on the Korean ECL (Existing Chemicals List)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

03/21/2019 EN (English US) 8/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Component	State or local regulations
2-Propanol(67-63-0)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List
2-Butoxyethanol(111-76-2)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Version : 1.0

Date of issue : 03/21/2019

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

03/21/2019 EN (English US) 9/9