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

1.1 Product identifier

- Trade name AUGEO® CLEAN MULTI

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

Uses of the Substance / Mixture

- Cleaning agent
- Waxes
- Stain removers and waxes removers
- Glass cleaner
- diluent and vehicle for fragrances

Remarks

- For professional and industrial installation and use only.

1.3 Details of the supplier of the safety data sheet

Company

ESSENTIAL CHEMICALS USA, LLC
100 Overlook Center, 2nd Floor
Princeton, New Jersey, 08540
USA, Tel. +1 713 307 3810

1.4 Emergency telephone

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CONTACT CHEMTREC (24-Hour Number): +1-800-424-9300 within the United States and Canada, or +1-703-527-3887 for international collect calls.

Disclaimer

The ® indicates a Registered Trademark in the United States and the ™ indicates a trademark in the United States. The mark may also be registered, subject of an application for registration, or a trademark in other countries.

SECTION 2: Hazards identification

Although OSHA has not adopted the environmental portion of the GHS regulations, this document may include information on environmental effects.

2.1 Classification of the substance or mixture

HCS 2012 (29 CFR 1910.1200)

Flammable liquids, Category 4	H227: Combustible liquid.
Eye irritation, Category 2A	H319: Causes serious eye irritation.

2.2 Label elements

HCS 2012 (29 CFR 1910.1200)

Pictogram

Signal Word

- Warning

Hazard Statements

- H227	Combustible liquid.
- H319	Causes serious eye irritation.

Precautionary Statements

Prevention

- P210	Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
- P264	Wash skin thoroughly after handling.
- P280	Wear protective gloves/ eye protection/ face protection.

Response

- P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337 + P313	If eye irritation persists: Get medical advice/ attention.
- P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage

- P403 + P235	Store in a well-ventilated place. Keep cool.

Disposal

- P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards which do not result in classification

None identified

SECTION 3: Composition/information on ingredients

3.1 Substance

Hazardous Ingredients and Impurities

Chemical name	Identification number CAS-No.	Concentration [%]
Isopropylidene glycol	100-79-8	>= 99 - <= 100

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

3.2 Mixture

- Not applicable, this product is a substance.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

- First responder needs to protect himself.
- Show this safety data sheet to the doctor in attendance.
- Place affected apparel in a sealed bag for subsequent decontamination.
- When symptoms persist or in all cases of doubt seek medical advice.

In case of inhalation

- Quickly move the person away from the contaminated area. Make the affected person rest.
- Obtain medical attention.

In case of skin contact

- Wash off immediately with plenty of water for at least 15 minutes.
- Use appropriate protective equipment when treating a contaminated person.
- In case of inflammation (redness, irritation, ...) obtain medical attention.

In case of eye contact

- Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- Keep eye wide open while rinsing.
- Always obtain medical advice, even if there are no symptoms.

In case of ingestion

- Do NOT induce vomiting.
- Obtain medical attention.
- Do not give anything to drink.

4.2 Most important symptoms and effects, both acute and delayed

Effects

- Chronic exposure may cause dermatitis.
- May cause irreversible eye damage.
- Loss of the eye

Symptoms

- Redness
- Swelling of tissue
- Causes skin burns.
- Lachrymation
- Conjunctivitis
- Causes eye burns.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

- Burns must be treated by a physician.
- Contact a poison control center.

SECTION 5: Firefighting measures

Flash point	196 °F (91 °C) closed cup

212 °F (100 °C)
open cup

Flammability class: Combustible

Autoignition temperature 734 °F (390 °C)

Flammability / Explosive limit No data available

5.1 Extinguishing media

Suitable extinguishing media

- Extinguishing media - small fires
- Water spray
- Multipurpose powders
- Carbon dioxide (CO2)
- Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF)

- Extinguishing media - large fires
- Water spray
- Multipurpose powders
- Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF)

Unsuitable extinguishing media

- Do not use a solid water stream as it may scatter and spread fire.
- High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting

- Combustible liquid.

- The pressure in sealed containers can increase under the influence of heat.

- Hazardous decomposition products formed under fire conditions.
- High concentrations of toxic or harmful products may remain in the residual liquid once the fire has been extinguished.

- Under fire conditions:
- Will burn
- On combustion, toxic gases are released.

Hazardous combustion products:

- Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

5.3 Advice for firefighters

Special protective equipment for fire-fighters

- Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.
- Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing.
- In the event of fire, wear self-contained breathing apparatus.
- For further information refer to section 8 "Exposure controls / personal protection."

Specific fire fighting methods

- Stay upwind.

- Fight fire with normal precautions from a reasonable distance.

- Do not use a solid water stream as it may scatter and spread fire.
- Cool down the containers / equipment exposed to heat with a water spray. Ensure that there is NO direct contact between the water and the product.
- Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information

- Evacuate personnel to safe areas.

- Intervention only by capable personnel who are trained and aware of the hazards of the product.
- Never approach containers which have been exposed to fire, without cooling them sufficiently.

- Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Avoid inhalation, ingestion and contact with skin and eyes.
- Wear chemical resistant personal protective equipment.
- Wear suitable gloves.
- Wear suitable protective clothing.

- Wear as appropriate:
- Face-shield
- Tightly fitting safety goggles.

- In the case of dust or aerosol formation use respirator with an approved filter.
- In the case of vapor formation use a respirator with an approved filter.

- Eliminate all ignition sources if safe to do so.

- Stop leak if safe to do so.

- For further information refer to section 8 "Exposure controls / personal protection."

6.2 Environmental precautions

- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

- Prevent further leakage or spillage if safe to do so.
- Contain the spilled material by diking.
- The product should not be allowed to enter drains, water courses or the soil.

- Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies

6.3 Methods and materials for containment and cleaning up

- No sparking tools should be used.

- Stop leak if safe to do so.
- Dam up with sand or inert earth (do not use combustible materials).

- Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).
- Shovel or sweep up.
- Keep in suitable, closed containers for disposal.
- Never return spills in original containers for re-use.

- Dispose of in accordance with local regulations.

6.4 Reference to other sections

- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 13. DISPOSAL CONSIDERATIONS

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Handle in accordance with good industrial hygiene and safety practice.

- Wear personal protective equipment.
- Wear suitable protective clothing.

- Avoid inhalation, ingestion and contact with skin and eyes.

- Avoid splashes.
- Avoid formation of aerosol.

- For personal protection, see section 8.

- Containers must be bonded and grounded when pouring or transferring material.
- This material contains a flammable or combustible liquid and vapor.

Hygiene measures

- Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this materials:
- 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- 3) Wash exposed skin promptly to remove accidental splashes or contact with material.

- The user is responsible for monitoring the working environment in accordance with local laws and regulations.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

- Keep locked up or in an area accessible only to qualified or authorized persons.

- Keep containers tightly closed in a dry, cool and well-ventilated place.
- Keep away from open flames, hot surfaces and sources of ignition.
- Keep away from incompatible materials to be indicated by the manufacturer.

- Observe the general rules of industrial fire protection.
- Areas containing this material should have fire safe practices and electrical equipment in accordance with applicable regulations and/or guidelines. Standards are primarily based on the material`s flashpoint, but may also take into account properties such as miscibility with water or toxicity. All local and national regulations should be followed. |par In the Americas, National Fire Protection Association (NFPA) 30: Flammable and Combustible Liquids Code, is a widely used standard. NFPA 30 establishes storage conditions for the following classes of materials: Class I Flammable Liquids, Flashpoint <37.8 °C. Class II Combustible Liquids, 37.8 °C < Flashpoint <60 °C. Class IIIa Combustible Liquids, 60 °C < Flashpoint < 93 °C. Class IIIb Combustible Liquids, Flashpoint > 93 °C.

Packaging material

Suitable material
- Unlined steel
- Plastic container of HDPE

7.3 Specific end use(s)

- no data available

SECTION 8: Exposure controls/personal protection

Introductory Remarks: These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

8.1 Control parameters

- Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Control measures

Engineering measures
- Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures :
- Effective exhaust ventilation system.
- Ensure adequate ventilation.
- Extract at emission point.
- Ensure that extracted air cannot be returned to the workplace through the ventilation system.
- Avoid splashes.
- Avoid formation of aerosol.

Individual protection measures

Respiratory protection
- This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation.
- When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.
- Use a respirator with an approved filter if a risk assessment indicates this is necessary.
- Keep in a well-ventilated place.

Hand protection
- Where there is a risk of contact with hands, use appropriate gloves.
- Gloves must be inspected prior to use.
- Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
- Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

- Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
- Impervious gloves

Eye protection
- Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.
- Eye contact should be prevented through the use of:
- Tightly fitting safety goggles.
- Face-shield

Skin and body protection
- Full protective suit
- Footwear protecting against chemicals.
- Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Impervious clothing
- Change working clothes after each work-shift.
- Contaminated work clothing should not be allowed out of the workplace.

Hygiene measures
- Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this materials:
- 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- 3) Wash exposed skin promptly to remove accidental splashes or contact with material.
- The user is responsible for monitoring the working environment in accordance with local laws and regulations.

Protective measures
- Emergency equipment immediately accessible, with instructions for use.
- Ensure that eyewash stations and safety showers are close to the workstation location.
- Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards, and/or risks that may occur during use.
- The protective equipment must be selected in accordance with current local regulations and in cooperation with the supplier of the protective equipment.

SECTION 9: Physical and chemical properties

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product information phone number in Section 1 for its exact specifications.

9.1 Information on basic physical and chemical properties

Physical state	liquid
Color	colorless
Odor	slight
Odor Threshold	No data available
Melting point/freezing point	Freezing point: -146 °F (-99 °C)
Initial boiling point and boiling range	Boiling point/boiling range: 361 - 376 °F (183 - 191 °C) (760 mmHg (1,013.25 hPa))
Flammability (solid, gas)	No data available
Flammability (liquids)	No data available
Flammability / Explosive limit	No data available
Flash point	196 °F (91 °C) closed cup 212 °F (100 °C) open cup Flammability class: Combustible
Autoignition temperature	No data available
Decomposition temperature	No data available
pH	Not applicable
Viscosity	Viscosity, dynamic : 11 mPa.s (68 °F (20 °C))
Solubility	Water solubility: (68 °F (20 °C))completely soluble Solubility in other solvents: Alcohol: miscible Esters: miscible Ether: miscible Aromatic hydrocarbons: miscible petroleum ether: miscible petrol: miscible
Partition coefficient: n-octanol/water	log Pow: 0.007
Vapor pressure	0.04 mmHg (0.05 hPa) (68 °F (20 °C))
Density	1.0670 g/cm3 (68 °F (20 °C))
Relative density	1.069 (68 °F (20 °C))
Relative vapor density	2.6
Particle characteristics	No data available

Evaporation rate (Butylacetate = 1)	0.027

9.2 Other information

Self-ignition	734 °F (390 °C) (759.81 mmHg (1,013 hPa)) Method: EU Test Guideline A15
Surface tension	33.5 mN/m (68 °F (20 °C))
Molecular weight	132.16 g/mol

SECTION 10: Stability and reactivity

10.1 Reactivity

- Stable at normal ambient temperature and pressure.

10.2 Chemical stability

- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

- No dangerous reaction known under conditions of normal use.
- Hazardous polymerization does not occur.

10.4 Conditions to avoid

- Keep away from open flames, hot surfaces and sources of ignition.
- Avoid high temperatures.
- Avoid excessive heat for prolonged periods of time.

10.5 Incompatible materials

- Strong oxidizing agents
- Strong acids
- On contact with acid, releases:
- Acetone

10.6 Hazardous decomposition products

- On combustion or on thermal decomposition (pyrolysis), releases:
- Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity

Isopropylidene glycol	LD50 : 7,000 mg/kg - Rat Not classified as hazardous for acute oral toxicity according to GHS. Published data

Acute inhalation toxicity

Isopropylidene glycol	LC50 - 4 h (aerosol) : > 5.11 mg/l - Rat , male and female Method: OECD Test Guideline 403 Not classified as hazardous for acute inhalation toxicity according to GHS. No mortality observed at this concentration. Unpublished reports

Acute dermal toxicity

Isopropylidene glycol	LD50 : > 2,000 mg/kg - Rat , male and female Method: OECD Test Guideline 402 Not classified as hazardous for acute dermal toxicity according to GHS. Semiocclusive No mortality observed at this dose. Unpublished reports
Acute toxicity (other routes of administration)	No data available

Skin corrosion/irritation

Isopropylidene glycol	Rabbit No skin irritation Method: OECD Test Guideline 404 Semiocclusive Unpublished reports

Serious eye damage/eye irritation

Isopropylidene glycol	Rabbit Causes serious eye irritation. Method: OECD Test Guideline 405 Unpublished reports

Respiratory or skin sensitization

Isopropylidene glycol	Maximization Test - Guinea pig Responding animals in GPMT < 30% Method: OECD Test Guideline 406 Unpublished reports

Mutagenicity

Genotoxicity in vitro

Isopropylidene glycol	Ames test with and without metabolic activation negative Method: OECD Test Guideline 471 Unpublished reports Gene mutation assays in mammalian cells. Strain: mouse lymphoma cells with and without metabolic activation negative Method: OECD Test Guideline 490 Unpublished reports

Genotoxicity in vivo

Isopropylidene glycol	In vivo micronucleus test - Mouse male Intraperitoneal route Method: OECD Test Guideline 474 negative Unpublished reports
Carcinogenicity	No data available

This product does not contain any ingredient designated as probable or suspected human carcinogens by:

NTP
IARC
OSHA

Toxicity for reproduction and development

Toxicity to reproduction / fertility

Isopropylidene glycol

Reproduction / developmental toxicity screening test - Rat, male and female, Oral
General Toxicity Parent NOAEL: 1,000 mg/kg bw/day
Fertility NOEL: 1,000 mg/kg bw/day

General Toxicity F1 NOEL: 1,000 mg/kg bw/day

OECD Test Guideline 422
Gavage, Highest dose tested, no impairment of fertility has been observed, Unpublished reports

One-Generation Reproduction Toxicity Study - Rat, male and female, Oral

General Toxicity Parent NOAEL: 1,000 mg/kg bw/day
Fertility NOAEL Parent: 1,000 mg/kg bw/day

General Toxicity F1 NOAEL: 1,000 mg/kg bw/day
Fertility NOAEL F1: 1,000 mg/kg bw/day
Developmental Toxicity NOAEL F1: 1,000 mg/kg bw/day

General Toxicity F2 NOAEL: 1,000 mg/kg bw/day
Developmental Toxicity NOAEL F2: 1,000 mg/kg bw/day

OECD Test Guideline 443
Gavage, Highest dose tested, no impairment of fertility has been observed, Unpublished internal reports

Developmental Toxicity/Teratogenicity

Isopropylidene glycol

Pre-natal - Rat, male and female, Oral
General Toxicity Maternal NOAEL: 1,000 mg/kg bw/day

Developmental Toxicity NOAEL F1: 1,000 mg/kg bw/day

Method: OECD Test Guideline 414
Gavage, Highest dose tested, no teratogenic effects have been observed, Unpublished reports

Pre-natal - Rabbit, female, Oral

General Toxicity Maternal NOAEL: 300 mg/kg bw/day

Developmental Toxicity NOAEL F1: 1,000 mg/kg bw/day

Method: OECD Test Guideline 414
Gavage, Highest dose tested, no teratogenic effects have been observed, Unpublished internal reports

STOT

STOT-single exposure

Isopropylidene glycol

The substance or mixture is not classified as specific target organ toxicant, single exposure according to GHS criteria.
Internal evaluation.

STOT-repeated exposure

Isopropylidene glycol	The substance or mixture is not classified as specific target organ toxicant, repeated exposure according to GHS criteria. Internal evaluation.
Isopropylidene glycol	Oral 5 Weeks - Rat , male and female NOAEL: 1000 mg/kg Method: OECD Test Guideline 422 Gavage Highest dose tested No systemic toxicity observed. Unpublished reports Inhalation (aerosol) 90-day - Rat , male and female NOAEC: > 5 mg/l Method: OECD Test Guideline 413 Highest dose tested No significant adverse effects were reported Unpublished reports
Experience with human exposure	No data available
Aspiration toxicity	No data available

SECTION 12: Ecological information

12.1 Toxicity

Aquatic Compartment

Acute toxicity to fish

Isopropylidene glycol	LC50 - 96 h : 16,700 mg/l - Pimephales promelas (fathead minnow) flow-through test Analytical monitoring: yes Method: according to a standardized method Not harmful to fish (LC/LL50 > 100 mg/L) Published data

Acute toxicity to daphnia and other aquatic invertebrates

Isopropylidene glycol	EC50 - 48 h : > 96 mg/l - Daphnia magna (Water flea) static test Analytical monitoring: yes Method: OECD Test Guideline 202 Not harmful to aquatic invertebrates. (EC/EL50 > 100 mg/L) Highest concentration tested Unpublished reports EC50 - 48 h : 4,600 mg/l - Daphnia magna (Water flea) static test Analytical monitoring: yes Method: OECD Test Guideline 202 Not harmful to aquatic invertebrates. (EC/EL50 > 100 mg/L) Unpublished reports

Toxicity to aquatic plants

Isopropylidene glycol	ErC50 - 72 h : > 92 mg/l - Pseudokirchneriella subcapitata (green algae) static test Analytical monitoring: yes Endpoint: Growth rate Method: OECD Test Guideline 201 Not harmful to algae (EC/EL50 > 100 mg/L) Highest concentration tested Unpublished reports NOEC - 72 h : 92 mg/l - Pseudokirchneriella subcapitata (green algae) static test Analytical monitoring: yes Endpoint: Growth rate Method: OECD Test Guideline 201 No adverse chronic effect observed up to and including the threshold of 1 mg / L. Highest concentration tested Unpublished reports ErC50 - 72 h : 15,000 mg/l - Raphidocelis subcapitata (freshwater green alga) static test Endpoint: Growth rate Method: OECD Test Guideline 201 Not harmful to algae (EC/EL50 > 100 mg/L) Unpublished reports NOEC - 72 h : 940 mg/l - Raphidocelis subcapitata (freshwater green alga) static test Endpoint: Growth rate Method: OECD Test Guideline 201 No adverse chronic effect observed up to and including the threshold of 1 mg / L. Unpublished reports

Toxicity to microorganisms

Isopropylidene glycol	- 3 h : - activated sludge static test Endpoint: Respiration inhibition EC50 : > 1,000 mg/l EC10 : > 1,000 mg/l Analytical monitoring: no Method: OECD Test Guideline 209 Unpublished reports

Chronic toxicity to fish	No data available

Chronic toxicity to daphnia and other aquatic invertebrates

Isopropylidene glycol	NOEC: 10 mg/l - 21 Days - Daphnia magna (Water flea) semi-static test Analytical monitoring: yes Endpoint: Reproduction Method: OECD Test Guideline 211 No adverse chronic effect observed up to and including the threshold of 1 mg / L. Unpublished reports

Terrestrial Compartment

Toxicity to soil dwelling organisms

Isopropylidene glycol	NOEC: 250 mg/kg - 56 Days - Eisenia fetida (earthworms) Endpoint: Reproduction Method: OECD Test Guideline 222 Unpublished reports EC10: 1,250 mg/kg - 28 Days - soil micro-organisms Endpoint: Nitrogen transformation Method: OECD Test Guideline 216 Unpublished reports

12.2 Persistence and degradability

Abiotic degradation

Stability in water

Isopropylidene glycol	DT50: Hydrolysis pH: 4.0 Temperature of hydrolysis: 15 °C Hydrolysis time: 6.59 Days Temperature of hydrolysis: 20 °C Hydrolysis time: 3.51 Days Temperature of hydrolysis: 25 °C Hydrolysis time: 0.959 Days Method: OECD Test Guideline 111 Unpublished reports

Physical- and photo-chemical elimination	No data available

Biodegradation

Biodegradability

Isopropylidene glycol	Ready biodegradability study: Method: OECD Test Guideline 301 F 86.2 % - 28 Days The 10 day time window criterion is fulfilled. The substance fulfills the criteria for ultimate aerobic biodegradability and ready biodegradability Theoretical oxygen demand Inoculum: activated sludge Unpublished internal reports

Degradability assessment

Isopropylidene glycol	The product is considered to be rapidly degradable in the environment

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water

Isopropylidene glycol	Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

Bioconcentration factor (BCF)	No data available

12.4 Mobility in soil

Adsorption potential (Koc)	
Isopropylidene glycol	Adsorption/Soil Log Koc: < 1.25 Method: OECD Test Guideline 121 Highly mobile in soils Unpublished reports
Known distribution to environmental compartments	No data available

12.5 Results of PBT and vPvB assessment

Isopropylidene glycol	Substance is not persistent, bioaccumulative, and toxic (PBT). Substance is not very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects

Ecotoxicity assessment

Short-term (acute) aquatic hazard	
Isopropylidene glycol	Not harmful to aquatic life (LC/LL50, EC/EL50 > 100 mg/L)
Long-term (chronic) aquatic hazard	
Isopropylidene glycol	No adverse chronic effect observed up to and including the threshold of 1 mg / L.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product Disposal

Prohibition

- Do not discharge directly into the environment.
- Dispose of in accordance with local regulations.
- Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.
- The Company encourages the recycle, recovery and reuse of materials, where permitted. If disposal is necessary, The Company recommends that organic materials, especially when classified as hazardous waste, be disposed of by thermal treatment or incineration at approved facilities. All local and national regulations should be followed.

Advice on cleaning and disposal of packaging

Prohibition

- Do NOT dispose of untreated packaging with industrial waste.
- Do not dispose of with domestic refuse.
- Empty remaining contents.
- Clean using steam.
- Monitor the residual vapors.
- Dispose of rinse water in accordance with local and national regulations.

- Containers that cannot be cleaned must be treated as waste.

- Dispose of contents/ container to an approved waste disposal plant.
- Dispose of in accordance with local regulations.

- Where possible recycling is preferred to disposal or incineration.
- The recycled material must be completely dry and free of pollutants.

SECTION 14: Transport information

Transportation status: IMPORTANT! Statements below provide additional data on listed transport classification.
The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

49 CFR

14.1 UN number	NA 1993
14.2 Proper shipping name	COMBUSTIBLE LIQUID, N.O.S. (Dioxolane derivative compounds)
14.3 Transport hazard class Label(s)	Combustible liquid. NONE
14.4 Packing group Packing group ERG No	 III 128
14.5 Environmental hazards **Marine pollutant**	NO
14.6 Special precautions for user	
Remarks	: The combustible liquid classification only applies when shipped in package sizes >119 gallons.

TDG
not regulated

NOM
not regulated

IMDG
not regulated

IATA
not regulated

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transportation regulations for hazardous materials, it would be advisable to check their validity with your sales office.

SECTION 15: Regulatory information

15.1 Notification status

Inventory Information	Status
United States TSCA Inventory	- All substances listed as active on the TSCA inventory
Canadian Domestic Substances List (DSL)	- Listed on Inventory
Australian Inventory of Industrial Chemicals (AIIC)	- Listed on Inventory
Japan. CSCL - Inventory of Existing and New Chemical Substances	- Listed on Inventory
Korea. Korean Existing Chemicals Inventory (KECI)	- Listed on Inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	- Listed on Inventory
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	- Listed on Inventory
Taiwan Chemical Substance Inventory (TCSI)	- Listed on Inventory
New Zealand. Inventory of Chemical Substances	- All components are listed on the NZIoC inventory. Additional HSNO obligations may apply. Please refer to Section 15 of SDS for New Zealand.
EU. European Registration, Evaluation, Authorization and Restriction of Chemical (REACH)	- When purchased from a Solvay legal entity based in the EEA ("European Economic Area"), this product is compliant with the registration provisions of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt, and/or registered. When purchased from a legal entity outside of the EEA, please contact your local representative for additional information.
Korea. Act on Registration and Evaluation of Chemicals	- When purchased from a Solvay legal entity based in Korea, this product is compliant with "Act on Registration and Evaluation of Chemicals" (AREC or K-REACH, Article 10) as all its components are either excluded, exempt, and/or (pre)registered. When purchased from a legal entity outside of Korea, please contact your local representative for additional information.

15.2 Federal Regulations

US. EPA EPCRA SARA Title III

SARA HAZARD DESIGNATION SECTIONS 311/312 (40 CFR 370)

Flammable (gases, aerosols, liquids, or solids)	Yes
Serious eye damage or eye irritation	Yes

The categories not mentioned are not relevant for the product.

Section 313 Toxic Chemicals (40 CFR 372.65)
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Section 302 Emergency Planning Extremely Hazardous Substance Threshold Planning Quantity (40 CFR 355)
This material does not contain any components with a section 302 EHS TPQ.

Section 302 Emergency Planning Extremely Hazardous Substance Reportable Quantity (40 CFR 355)
This material does not contain any components with a SARA 302 RQ.

Section 304 Emergency Release Notification Reportable Quantity (40 CFR 355)
This material does not contain any components with a section 304 EHS RQ.

US. EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4)

Components	CAS-No.	Reportable quantity
2-Propanone	67-64-1	5000 lb

15.3 State Regulations

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

SECTION 16: Other information

NFPA (National Fire Protection Association) - Classification

Health	2 moderate
Flammability	2 moderate
Instability or Reactivity	0 minimal

Further information

- Distribute new edition to clients
- Update
- See section 1

Date Prepared: 01/28/2025

Key or legend to abbreviations and acronyms used in the safety data sheet

- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration
- NTP: National Toxicology Program
- IARC: International Agency for Research on Cancer
- NIOSH: National Institute for Occupational Safety and Health
- ADR: European Agreement on International Carriage of Dangerous Goods by Road.
- ADN: European Agreement on the International Carriage of Dangerous Goods by Inland Waterways.
- RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
- IATA: International Air Transport Association.
- ICAO-TI: Technical Specification for Safe Transport of Dangerous Goods by Air.
- IMDG: International Maritime Dangerous Goods.
- TWA: Time weighted average

- ATE: Estimated value of acute toxicity
- EC: European Community number
- CAS: Chemical Abstracts Service.
- LD50: Substance that causes 50% (half) death in the test animals group (Median Fatal Dose).
- LC50: Substance concentration causing 50% (half) death in the test animals group.
- EC50: Effective Concentration of the substance causing the maximum of 50%.
- PBT: Persistent, Bioaccumulative and Toxic substance.
- vPvB: Very Persistent and Very Bioaccumulative.
- SEA: Classification, labeling, packaging regulation
- DNEL: Derived No Effect Level
- PNEC: Predicted No Effect Concentration
- STOT: Specific Target Organ Toxicity

Not all acronyms listed above are referenced in this SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose, and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in any other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.