

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 8/25/2023 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Trade name : TURBO-KLEEN™

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Industrial

1.3. Supplier

Supplier

RectorSeal, LLC 2601 Spenwick Drive Houston, Texas 77055 USA

T (800)-231-3345 or (713)263-8001

www.rectorseal.com

1.4. Emergency telephone number

Emergency number : For Chemical Emergency Call CHEMTREC 24hr/day 7days/week

Within USA and Canada: 1.800.424.9300 Outside USA and Canada: +1.703.527.3887

(collect calls accepted)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 3 H226 Flammable liquid and vapor

Specific target organ toxicity – Single exposure, Category 3, Narcosis H336 May cause drowsiness or dizziness

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)





Signal word (GHS US) : Warning

Hazard statements (GHS US) : H226 - Flammable liquid and vapor

H336 - May cause drowsiness or dizziness

Precautionary statements (GHS US) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P233 - Keep container tightly closed.

P240 - Ground/Bond container and receiving equipment.

P241 - Use explosion-proof electrical/ventilating/lighting equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge. P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower.

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.

P312 - Call a poison center or doctor if you feel unwell.

P370+P378 - In case of fire: Use media other than water to extinguish. P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

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

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

Safety Data Sheet

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

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

<u> </u>			
Name	Product identifier	%	GHS US classification
Propylene Glycol Monomethyl Ether Acetate	CAS-No.: 108-65-6	100	Flam. Liq. 3, H226 STOT SE 3, H336

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. 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 : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

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

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : May cause drowsiness or dizziness.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

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

5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapor.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. 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

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Exercise caution. Spill area may be slippery. No open flames, no sparks, and no smoking. Avoid

breathing dust/fume/gas/mist/vapors/spray.

6.1.2. 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".

6.2. Environmental precautions

Avoid release to the environment.

6.3. 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.

6.4. Reference to other sections

For further information refer to section 13.

8/25/2023 (Issue date) US - en 2/8

Safety Data Sheet

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

SECTION 7: Handling and storage

7.1. 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 outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapors/spray.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

7.2. 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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

TURBO-KLEEN™

No additional information available

Propylene Glycol Monomethyl Ether Acetate (108-65-6)

No additional information available

8.2. Appropriate engineering controls

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

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Materials for protective clothing:

Wear protective clothing

Hand protection:

Neoprene or nitrile rubber gloves

Туре	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR), Neoprene rubber (HNBR)	2 (> 30 minutes)	0.3 mm - 0.6 mm	

Eye protection:

Wear eye protection

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

No respiratory protection needed under normal use conditions

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: LiquidAppearance: Liquid.Color: ColorlessOdor: Sweet

Odor threshold : No data available pH : No data available

Melting point : ≤ -65.99 °C @ 760 mmHg

Freezing point : No data available
Boiling point : 145 – 146 °F

Flash point : 45.5 °C (Closed cup)

8/25/2023 (Issue date) US - en 3/8

Safety Data Sheet

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

Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : No data available
Vapor pressure : 2.69 mm Hg @ 20 °C
Relative vapor density at 20°C : No data available
Relative density : 0.97 @ 25 °C
Solubility : Water: 198 g/l
Partition coefficient n-octanol/water (Log Pow) : 1.2 @ 20 °C

Auto-ignition temperature : 333 °C @ 760 mmHg

Decomposition temperature : No data available

Viscosity, kinematic : 1130000 mm²/s @ 25 °C

Viscosity, dynamic : No data available

Explosion limits : 1.3 – 13.1 vol %

Explosive properties : No data available

Oxidizing properties : No data available

9.2. Other information

VOC content : ≈ 96.9 % Theoretical value

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

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

10.5. Incompatible materials

No additional information available

10.6. 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
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Propylene Glycol Monomethyl Ether Acetate (108-65-6)		
LD50 oral rat	6190 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral)	
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)	
LD50 dermal rabbit	> 5000 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Male / female, Experimental value, Dermal)	
ATE US (oral)	6190 mg/kg body weight	

Skin corrosion/irritation : Not classified

Propylene Glycol Monomethyl Ether Acetate (108-65-6)	
Н	4 (20 %)

Serious eye damage/irritation : Not classified

Propylene Glycol Monomethyl Ether Acetate (108-65-6)	
рН	4 (20 %)

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

Safety Data Sheet

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

Carcinogenicity : Not classified Reproductive toxicity : Not classified

STOT-single exposure : May cause drowsiness or dizziness.

STOT-single exposure May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified

Propylene Glycol Monomethyl Ether Acetate (108-65-6)

NOAEL (oral,rat,90 days)	≥ 1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEL (dermal,rat/rabbit,90 days)	> 1000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

Aspiration hazard : Not classified

Viscosity, kinematic : 1130000 mm²/s @ 25 °C

Propylene Glycol Monomethyl Ether Acetate (108-65-6)

Viscosity, kinematic 1.23 mm²/s (20 °C, DIN 51562: Capillary viscometer)

Symptoms/effects : May cause drowsiness or dizziness.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse

effects in the environment.

Propylene Glycol Monomethyl Ether Acetate (108-65-6)		
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oryzias latipes	
EC50 - Crustacea [1]	370 mg/l	
EC50 72h - Algae [1]	> 1000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
EC50 96h - Algae [1]	> 1000 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)	
NOEC (chronic)	≥ 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOFC chronic fish	47.5 mg/l Test organisms (species): Oryzias latines Duration: '14 d'	

12.2. Persistence and degradability

Propylene Glycol Monomethyl Ether Acetate (108-65-6)

Not rapidly degradable

Persistence and degradability Readily biodegradable in the soil. Readily biodegradable in water.

12.3. Bioaccumulative potential

TURBO-KLEEN™

Partition coefficient n-octanol/water (Log Pow) 1.2 @ 20 °C

Propylene Glycol Monomethyl Ether Acetate (108-65-6)

Partition coefficient n-octanol/water (Log Pow)	1.2 (Experimental value, Equivalent or similar to OECD 117, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

Propylene Glycol Monomethyl Ether Acetate (108-65-6) Surface tension 29.4 mN/m (20 °C, 100 vol %, EU Method A.5: Surface tension) Organic Carbon Normalized Adsorption Coefficient (Log Koc) 0.264 (log Koc, QSAR) Ecology - soil Highly mobile in soil.

8/25/2023 (Issue date) US - en 5/8

Safety Data Sheet

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

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Additional information : Flammable vapors may accumulate in the container.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
3271	UN3271	3271	3271
14.2. Proper Shipping Name			
Ethers, n.o.s. (Propylene Glycol Monomethyl Ether Acetate)	ETHERS, N.O.S. (Propylene Glycol Monomethyl Ether Acetate)	ETHERS, N.O.S. (Propylene Glycol Monomethyl Ether Acetate)	Ethers, n.o.s. (Propylene Glycol Monomethyl Ether Acetate)
Transport document description			
UN3271 Ethers, n.o.s. (Propylene Glycol Monomethyl Ether Acetate), 3, III	UN3271 ETHERS, N.O.S. (Propylene Glycol Monomethyl Ether Acetate), 3, III	UN 3271 ETHERS, N.O.S. (Propylene Glycol Monomethyl Ether Acetate), 3, III	UN 3271 Ethers, n.o.s. (Propylene Glycol Monomethyl Ether Acetate) 3, III
14.3. Transport hazard class(es	s)		
3	3	3	3
PLANMABLE LIQUID	3	3	3
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information availal	ble		

14.6. Special precautions for user

UN-No.(DOT)

: UN3271

: 150

DOT Special Provisions (49 CFR 172.102)

: B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx)

8/25/2023 (Issue date) US - en 6/8

Safety Data Sheet

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

DOT Packaging Non Bulk (49 CFR 173.xxx) : 203 DOT Packaging Bulk (49 CFR 173.xxx) : 242 DOT Quantity Limitations Passenger aircraft/rail : 60 L (49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49

CFR 175.75)

DOT Vessel Stowage Location

: 220 L

: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

TDG

UN-No. (TDG) : UN3271

TDG Special Provisions

: 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks). (2) Despite subsection (1), the technical name for the following dangerous goods is not required

to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name:

(a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S:

(b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S;

(c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S;

(d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or

(e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S.

(3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment:

(a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or (b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS.

Explosive Limit and Limited Quantity Index : 5 L Excepted quantities (TDG) : E1

Passenger Carrying Road Vehicle or Passenger

Carrying Railway Vehicle Index

: 60 L

Emergency Response Guide (ERG) Number : 127

IMDG

Special provision (IMDG) : 223, 274 Limited quantities (IMDG) : 5 L Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : P001, LP01 IBC packing instructions (IMDG) : IBC03 Tank instructions (IMDG) : T4

Tank special provisions (IMDG) : TP1, TP29

EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS

: S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS EmS-No. (Spillage)

Stowage category (IMDG) : A

IATA

PCA Excepted quantities (IATA) : F1 PCA Limited quantities (IATA) : Y344 PCA limited quantity max net quantity (IATA) : 10L PCA packing instructions (IATA) : 355 : 60L PCA max net quantity (IATA) CAO packing instructions (IATA) : 366 : 220L CAO max net quantity (IATA) Special provision (IATA) : A3 ERG code (IATA) : 3L

8/25/2023 (Issue date) US - en 7/8

Safety Data Sheet

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

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA

Propylene Glycol Monomethyl Ether Acetate (108-65-6)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Propylene Glycol Monomethyl Ether Acetate (108-65-6)

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

National regulations

TURBO-KLEEN™

This product is listed on the TSCA inventory or otherwise complies with TSCA premanufacture notification requirements

Propylene Glycol Monomethyl Ether Acetate (108-65-6)

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

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS 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

SECTION 16: Other information

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

Full text of H-phra	ases
H226	Flammable liquid and vapor
H336	May cause drowsiness or dizziness

Safety Data Sheet (SDS), USA

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.

8/25/2023 (Issue date) US - en 8/8