

Revision Date 05-Dec-2019

Version 5

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

**Product Name** **KC-41 Freezer Cleaner**

### Other means of identification

**Product Code** 20220

### Recommended use of the chemical and restrictions on use

**Recommended Use** Freezer cleaner

**Uses advised against** Follow the directions for use on the label when applying this product

### Details of the supplier of the safety data sheet

#### Manufacturer Address

PSSI Chemical Innovations  
3729 Peddle Hollow Road  
Kieler, WI 53812

#### Emergency telephone number

**Company Phone Number** 888-671-5366

**Emergency Telephone** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Flammable liquids	Category 3

### Label elements

#### Emergency Overview

### **WARNING**

#### **Hazard statements**

Causes skin irritation

Causes serious eye irritation

Flammable liquid and vapor



**Appearance** Aqueous solution

**Color** Blue

**Odor** Slight solvent

#### **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Keep away from heat/sparks/open flames/hot surfaces. No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Wear protective gloves/eye protection/face protection

#### **Precautionary Statements - Response**

Specific treatment (see Section 4 on SDS)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish

#### **Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not Applicable

**Other Information**

- Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS		
Chemical Name	CAS No.	weight-%
1,2-Propylene glycol	57-55-6	38-46
Water	7732-18-5	35-45
Ethyl alcohol	64-17-5	7-11
Propylene glycol monomethyl ether	107-98-2	3-7
2-Aminoethanol	141-43-5	2-4
Trade Secret 1	Proprietary	0.5-1.5
Methanol	67-56-1	< 0.5
Trade Secret 2	Proprietary	< 0.3

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES**

**First aid measures**

**Eye contact** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. If eye irritation persists: Get medical advice/attention.

**Skin contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing and shoes before reuse.

**Inhalation** Not an expected route of exposure.

**Ingestion** Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician immediately.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** See Section 11 for symptom information.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

**Suitable extinguishing media**

Dry chemical. Water spray (fog). Carbon dioxide (CO2). Foam.

**Unsuitable extinguishing media** No information available.

**Specific hazards arising from the chemical**

Flammable. Vapors may travel to source of ignition and flash back.

**Hazardous combustion products** Carbon monoxide. Carbon dioxide (CO2).

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** May be ignited by heat, sparks or flames.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers with flooding quantities of water until well after fire is out.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Use personal protection recommended in Section 8. Ensure adequate ventilation, especially in confined areas.

**For emergency responders** Isolate area. Keep unnecessary personnel away.

**Environmental precautions**

**Environmental precautions** Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

**Methods for cleaning up** Use clean non-sparking tools to collect absorbed material. May be ignited by friction, heat, sparks or flames. Soak up with inert absorbent material. Collect spillage. Sweep up and shovel into suitable containers for disposal. Following product recovery, flush area with water.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling**

Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Do not eat, drink or smoke when using this product. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**

Keep container tightly closed in a dry and well-ventilated place. Keep from freezing. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

**Incompatible materials**

Strong oxidizing agents. Strong acids.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl alcohol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm, 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm TWA: 1000 ppm, 1900 mg/m <sup>3</sup>
Propylene glycol monomethyl ether 107-98-2	STEL: 100 ppm TWA: 50 ppm	(vacated) STEL: 150 ppm, 540 mg/m <sup>3</sup>	TWA: 100 ppm, 360 mg/m <sup>3</sup> STEL: 150 ppm, 540 mg/m <sup>3</sup>
2-Aminoethanol 141-43-5	STEL: 6 ppm TWA: 3 ppm	TWA: 3 ppm, 6 mg/m <sup>3</sup> (vacated) STEL: 6 ppm, 15 mg/m <sup>3</sup>	IDLH: 30 ppm TWA: 3 ppm, 8 mg/m <sup>3</sup> STEL: 6 ppm, 15 mg/m <sup>3</sup>

**Appropriate engineering controls**

**Engineering Controls**

Showers, eyewash stations, ventilation system.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Splash proof chemical goggles and face shield.

**Skin and body protection**

Wear protective Neoprene™ gloves or rubber gloves. Normal work clothing (long sleeved shirt and long pants) is recommended. Rubber boots recommended. Apron recommended. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Respiratory protection**

**General Hygiene Considerations**

Wash face, hands and any exposed skin thoroughly after handling. Wash contaminated clothing and shoes before reuse. Do not eat, drink or smoke when using this product.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid	<b>Odor</b>	Slight solvent
<b>Appearance</b>	Aqueous solution	<b>Odor threshold</b>	No information available
<b>Color</b>	Blue	<b>Remarks • Method</b>	
<b>Property</b>	<b>Values</b>		
<b>pH</b>	11		±0.5 @ 21°C
<b>Melting point/freezing point</b>	< -78 °C / -108 °F		
<b>Boiling point / boiling range</b>	No information available		
<b>Flash point</b>	~ 49 °C / ~ 120 °F		
<b>Evaporation rate</b>	No information available		
<b>Flammability (solid, gas)</b>	No information available		
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>	No information available		
<b>Lower flammability limit:</b>	No information available		
<b>Vapor pressure</b>	No information available		
<b>Vapor density</b>	No information available		
<b>Specific Gravity</b>	1.017 g/cc		
<b>Water solubility</b>	Soluble in water		
<b>Solubility in other solvents</b>	No information available		
<b>Partition coefficient</b>	No information available		
<b>Autoignition temperature</b>	No information available		
<b>Decomposition temperature</b>	No information available		
<b>Kinematic viscosity</b>	No information available		
<b>Dynamic viscosity</b>	No information available		
<b>Explosive properties</b>	No information available		
<b>VOC Content (%)</b>	14.965% (1.27 lbs./gal)		

**10. STABILITY AND REACTIVITY**

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Strong oxidizing agents. Strong acids.

**Hazardous Decomposition Products**

Carbon monoxide. Carbon dioxide (CO2).

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Product Information**

**Inhalation** Not an expected route of exposure.  
**Eye contact** Irritating to eyes. Direct eye contact causes eye irritation and redness of eye tissues.  
**Skin Contact** Irritating to skin.  
**Ingestion** Harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
1,2-Propylene glycol 57-55-6	= 20 g/kg ( Rat )	= 20800 mg/kg ( Rabbit )	-
Water 7732-18-5	> 90 mL/kg ( Rat )	-	-
Ethyl alcohol 64-17-5	= 7060 mg/kg ( Rat )	-	= 124.7 mg/L ( Rat ) 4 h
Propylene glycol monomethyl ether 107-98-2	= 5000 mg/kg ( Rat )	= 13 g/kg ( Rabbit )	> 7559 ppm ( Rat ) 6 h
2-Aminoethanol 141-43-5	= 1720 mg/kg ( Rat )	= 1000 mg/kg ( Rabbit ) = 1 mL/kg ( Rabbit )	-
Trade Secret 1	= 1400 mg/kg ( Rat ) = 1378 mg/kg ( Rat )	> 2 g/kg ( Rabbit )	-
Methanol 67-56-1	= 6200 mg/kg ( Rat )	= 15800 mg/kg ( Rabbit )	= 22500 ppm ( Rat ) 8 h = 64000 ppm ( Rat ) 4 h
Trade Secret 2	= 10 g/kg ( Rat ) = 1658 mg/kg ( Rat )	-	-

**Information on toxicological effects**

**Symptoms** No information available.  
**Delayed and immediate effects as well as chronic effects from short and long-term exposure**  
**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethyl alcohol - 64-17-5	A3	-	Known	X

**ACGIH (American Conference of Governmental Industrial Hygienists)**  
 A3 - Animal Carcinogen  
**NTP (National Toxicology Program)**  
 Known - Known Carcinogen  
**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**  
 X - Present

**Reproductive toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 0% of the mixture consists of ingredient(s) of unknown toxicity  
 The following values are calculated based on chapter 3.1 of the GHS document  
**Oral LD50** 9,219.00 mg/kg  
**Dermal LD50** 13,912.00 mg/kg  
**Mist** 17.33 mg/l  
**Vapor** 309.61 mg/l

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Harmful to aquatic life with long lasting effects

1.0% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
1,2-Propylene glycol 57-55-6	19000: 96 h Pseudokirchneriella subcapitata mg/L EC50	41-47: 96 h Oncorhynchus mykiss mL/L LC50 static 51600: 96 h Oncorhynchus mykiss mg/L LC50 static 51400: 96 h Pimephales promelas mg/L LC50 static 710: 96 h Pimephales promelas mg/L LC50	1000: 48 h Daphnia magna mg/L EC50 Static 10000: 24 h Daphnia magna mg/L EC50
Ethyl alcohol 64-17-5	-	13400-15100: 96 h Pimephales promelas mg/L LC50 flow-through 12.0-16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static	9268-14221: 48 h Daphnia magna mg/L LC50 10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static
Propylene glycol monomethyl ether 107-98-2	-	20.8: 96 h Pimephales promelas g/L LC50 static 4600-10000: 96 h Leuciscus idus mg/L LC50 static	23300: 48 h Daphnia magna mg/L EC50
2-Aminoethanol 141-43-5	15: 72 h Desmodesmus subspicatus mg/L EC50	227: 96 h Pimephales promelas mg/L LC50 flow-through 3684: 96 h Brachydanio rerio mg/L LC50 static 300-1000: 96 h Lepomis macrochirus mg/L LC50 static 200: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 114-196: 96 h Oncorhynchus mykiss mg/L LC50 static	65: 48 h Daphnia magna mg/L EC50
Methanol 67-56-1	-	100: 96 h Pimephales promelas mg/L LC50 static 28200: 96 h Pimephales promelas mg/L LC50 flow-through 18-20: 96 h Oncorhynchus mykiss mL/L LC50 static 13500-17600: 96 h Lepomis macrochirus mg/L LC50 flow-through 19500-20700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	-
Trade Secret 2	1.01: 72 h Desmodesmus subspicatus mg/L EC50	41: 96 h Lepomis macrochirus mg/L LC50 static 59.8: 96 h Pimephales promelas mg/L LC50 static	610: 24 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation**

Chemical Name	Partition coefficient
Ethyl alcohol - 64-17-5	-0.32
Propylene glycol monomethyl ether - 107-98-2	-0.437
2-Aminoethanol - 141-43-5	-1.91
Methanol - 67-56-1	-0.77

**Mobility**

Soluble in water.

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Dispose of in accordance with federal, state and local regulations.

Chemical Name	California Hazardous Waste Status	
Ethyl alcohol - 64-17-5	Toxic	Ignitable
Methanol - 67-56-1	Toxic	Ignitable

**14. TRANSPORT INFORMATION**

**DOT**

Containers of 119 gallons or less:

Combustible Liquid (49 CFR 173.120(b)(2)): This material is not regulated under 49 CFR if in a container of 119 gallon capacity or less for ground transportation.  
Exception 49 CFR 173.150(f)(2): Combustible liquids. This exception does not apply to transportation by vessel or aircraft.

Containers of more than 119 gallons:

UN/ID No. NA1993  
 Proper shipping name Combustible liquid, n.o.s. (contains ethanol)  
 Hazard Class Comb liq  
 Packing Group III  
 Emergency Response Guide Number 128

**IATA and IMDG**

UN/ID No. UN1993  
 Proper shipping name Flammable liquids, n.o.s. (contains ethanol)  
 Hazard Class 3

Packing Group III

**15. REGULATORY INFORMATION**

**International Inventories**

TSCA Complies  
 DSL/NDSL Complies  
 EINECS/ELINCS No information available

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute health hazard Yes  
 Chronic Health Hazard No  
 Fire hazard Yes  
 Sudden release of pressure hazard No  
 Reactive Hazard No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Methanol 67-56-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

**US State Regulations**

**California Proposition 65**

Ethyl alcohol is only considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage.  
 WARNING! "This product can expose you to chemicals which is [are] known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)." Methanol 67-56-1; Ethylene oxide 75-21-8  
 WARNING! "This product can expose you to chemicals which is [are] known to the State of California to cause cancer. For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)." Ethylene oxide 75-21-8; Acetaldehyde 75-07-0; 1,4-dioxane 123-91-1;

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
1,2-Propylene glycol - 57-55-6	X	-	X
Ethyl alcohol - 64-17-5	X	X	X
Propylene glycol monomethyl ether - 107-98-2	X	X	X
2-Aminoethanol - 141-43-5	X	X	X
Methanol - 67-56-1	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not Applicable

**16. OTHER INFORMATION**

<b>NFPA</b>	Health hazards 1	Flammability 3	Instability 0	<b>Physical and Chemical Properties</b> None
<b>HMIS</b>	Health hazards 1	Flammability 3	Physical hazards 0	<b>Personal protection</b> C (safety glasses, gloves, synthetic apron)

Prepared By Technical Department  
 Issue Date 06-Nov-2014  
 Revision Date 05-Dec-2019  
 Version 5  
 Revision Note SDS section(s) updated: 9, 15

**Disclaimer**

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. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The health hazards given on this SDS apply to this product in its concentrated form (as supplied) and may differ significantly at use dilution. The signs and symptoms of exposure apply only to negligence in handling or misuse of the concentrated product and not to the routine exposure of the diluted product under conditions of ordinary use.

**End of Safety Data Sheet**