

Issue Date 19-Dec-2012

Revision Date: 20-Dec-2012

Version 1

1. IDENTIFICATION

Product Identifier

Product Name Glass Cleaner

Other means of identification

SDS # PCP-018

UN/ID No

UN1950

Product Code

2527/Glass Cleaner/141-2527
10963/Glass & Surface Cleaner/10048155910963
92673/Glass & Surface Cleaner-Home Store/39277-92673
27329/Foaming Glass Cleaner/10048155927329

Recommended use of the chemical and restrictions on use

Recommended Use Glass cleaner.

Details of the supplier of the safety data sheet

Supplier Address

Personal Care Products LLC
3001 West Big Beaver Rd. Ste. 520
Troy, MI 48084
248.971.7600
<http://www.personal-care.com>

Emergency Telephone Number

Company Phone Number 248-971-7600
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Flammable Aerosols	Category 2

Signal Word

Danger

Hazard Statements

Harmful if inhaled
May cause genetic defects
May cause cancer
Harmful in contact with skin

Flammable Aerosol

Pressurized container: May burst if heated

**Appearance** Aerosols**Physical State** Aerosol**Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

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

Use only outdoors or in a well-ventilated area

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

Do not spray on an open flame or other ignition source

Pressurized container: Do not pierce or burn, even after use

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention

IF ON SKIN: Wash with plenty of soap and water

Call a poison center or doctor/physician if you feel unwell

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Precautionary Statements - Storage

Store locked up

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)

Causes mild skin irritation

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Propane	74-98-6	1-5
N-Butane	106-97-8	1-5
Isobutane	75-28-5	1-5
Isopropyl alcohol	67-63-0	1-5
Butoxyethanol	111-76-2	1-5
Alcohol	64-17-5	0-1
Morpholine	110-91-8	0-1
Alcohol ethoxylate	9002-92-0	0-1
Sodium Nitrite	7632-00-0	0-1

4. FIRST-AID MEASURES

First Aid Measures

General Advice	If exposed or concerned: Get medical advice/attention.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash with soap and water. Call a physician if you feel unwell. Wash contaminated clothing before reuse.
Inhalation	Remove to fresh air.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects

Symptoms	Direct contact with eyes may cause temporary irritation. May include redness, drying and cracking of skin.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Aerosols are under pressure. Perforation of the pressurized container may cause bursting of the can. Flammable.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protective equipment as required. Remove all sources of ignition.
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Methods and material for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Clean-Up	Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection recommended in Section 8. Avoid breathing vapors or mists. Use only in well-ventilated areas. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Protect from sunlight. Do not store at temperatures above 120°F.

Incompatible Materials Strong oxidizing agents. No information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
N-Butane 106-97-8	TWA: 1000 ppm	(vacated) TWA: 800 ppm (vacated) TWA: 1900 mg/m ³	TWA: 800 ppm TWA: 1900 mg/m ³
Propane 74-98-6	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1800 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m ³	IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m ³
Isobutane 75-28-5	TWA: 1000 ppm	-	TWA: 800 ppm TWA: 1900 mg/m ³
Isopropyl alcohol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³
Butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m ³ (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m ³
Alcohol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³
Morpholine 110-91-8	TWA: 20 ppm S*	TWA: 20 ppm TWA: 70 mg/m ³ (vacated) TWA: 20 ppm (vacated) TWA: 70 mg/m ³ (vacated) STEL: 30 ppm (vacated) STEL: 105 mg/m ³ (vacated) S* S*	IDLH: 1400 ppm TWA: 20 ppm TWA: 70 mg/m ³ STEL: 30 ppm STEL: 105 mg/m ³

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Avoid contact with eyes.

Skin and Body Protection Wear suitable protective clothing.

Respiratory Protection Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Aerosol	Odor	Not determined
Appearance	Aerosols	Odor Threshold	Not determined
Color	Not determined		

<u>Property</u>	<u>The following physical data are approximate only and do not represent specification values. They should be used only in the context of this safety data sheet.</u>	<u>Remarks • Method</u>
pH	9-10	
Melting Point/Freezing Point	~0 °C / ~32 °F	
Boiling Point/Boiling Range	97.2 °C / 206.6 °F	
Flash Point	Flammable aerosol	Flashpoint listed is for propellant
Evaporation Rate	Faster than water	
Flammability (Solid, Gas)	n/a-liquid	
Upper Flammability Limits	Flammable aerosol	
Lower Flammability Limit	Flammable aerosol	
Vapor Pressure	Higher than water	
Vapor Density	Similar to water	
Specific Gravity	<1	(1=Water)
Water Solubility	Soluble in water	
Solubility in other solvents	Soluble in some polar solvents	
Partition Coefficient	Only slight partitioning	
Autoignition Temperature	Flammable aerosol	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not viscous	
Dynamic Viscosity	Not viscous	
Explosive Properties	Pressurized container: May burst if heated	
Oxidizing Properties	Not an oxidizer	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Excessive heat and fire.

Incompatible Materials

Strong oxidizing agents. No information available.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Eye Contact	Avoid contact with eyes.
Skin Contact	Harmful in contact with skin. Causes mild skin irritation.
Inhalation	Harmful if inhaled.
Ingestion	Do not taste or swallow.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
N-Butane 106-97-8	-	-	= 658 mg/L (Rat) 4 h
Propane 74-98-6	-	-	= 658 mg/L (Rat) 4 h
Isobutane 75-28-5	-	-	= 658 mg/L (Rat) 4 h
Isopropyl alcohol 67-63-0	= 4396 mg/kg (Rat)	= 12800 mg/kg (Rat) = 12870 mg/kg (Rabbit)	= 72.6 mg/L (Rat) 4 h
Butoxyethanol 111-76-2	= 470 mg/kg (Rat)	= 2270 mg/kg (Rat) = 220 mg/kg (Rabbit)	= 2.21 mg/L (Rat) 4 h = 450 ppm (Rat) 4 h
Alcohol 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4 h
Morpholine 110-91-8	= 1050 mg/kg (Rat)	= 310 mg/kg (Rabbit)	-
Alcohol ethoxylate 9002-92-0	= 1 g/kg (Rat)	-	-
Sodium lauryl sulfate 151-21-3	= 1288 mg/kg (Rat)	= 580 mg/kg (Rabbit)	> 3900 mg/m ³ (Rat) 1 h
Sodium benzoate 532-32-1	= 2100 mg/kg (Rat)	-	-
Sodium Nitrite 7632-00-0	= 85 mg/kg (Rat)	-	= 5.5 mg/L (Rat) 4 h

Information on physical, chemical and toxicological effects

Symptoms	Direct contact with eyes may cause temporary irritation. May include redness, drying and cracking of skin.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Germ cell mutagenicity	May cause genetic defects.
Carcinogenicity	May cause cancer. Isopropyl Alcohol (IPA) is an IARC Monograph Group 3 chemical. IPA is a Group 1 when manufactured by the strong-acid process. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl alcohol 67-63-0		Group 3		X
Butoxyethanol 111-76-2	A3	Group 3		
Alcohol 64-17-5	A3	Group 1	Known	X
Morpholine 110-91-8		Group 3		
Sodium Nitrite 7632-00-0		Group 2A		X

IARC (International Agency for Research on Cancer)
 Group 1 - Carcinogenic to Humans
 Group 2A - Probably Carcinogenic to Humans
 Group 3 IARC components are "not classifiable as human carcinogens"

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION**Ecotoxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Isopropyl alcohol 67-63-0	1000: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50 1000: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	9640: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 11130: 96 h <i>Pimephales promelas</i> mg/L LC50 static 1400000: 96 h <i>Lepomis macrochirus</i> µg/L LC50		13299: 48 h <i>Daphnia magna</i> mg/L EC50
Butoxyethanol 111-76-2		1490: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 2950: 96 h <i>Lepomis macrochirus</i> mg/L LC50		1698 - 1940: 24 h <i>Daphnia magna</i> mg/L EC50 1000: 48 h <i>Daphnia magna</i> mg/L EC50
Alcohol 64-17-5		12.0 - 16.0: 96 h <i>Oncorhynchus mykiss</i> mL/L LC50 static 100: 96 h <i>Pimephales promelas</i> mg/L LC50 static 13400 - 15100: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	9268 - 14221: 48 h <i>Daphnia magna</i> mg/L LC50 10800: 24 h <i>Daphnia magna</i> mg/L EC50 2: 48 h <i>Daphnia magna</i> mg/L EC50 Static
Morpholine 110-91-8	28: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 static	350: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 375 - 460: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 1000: 96 h <i>Brachydanio rerio</i> mg/L LC50 static	EC50 = 57.0 mg/L 30 min	100: 24 h <i>Daphnia magna</i> mg/L EC50

Sodium lauryl sulfate 151-21-3	53: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50 30 - 100: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50 117: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 3.59 - 15.6: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 static	8 - 12.5: 96 h <i>Pimephales promelas</i> mg/L LC50 static 15 - 18.9: 96 h <i>Pimephales promelas</i> mg/L LC50 static 22.1 - 22.8: 96 h <i>Pimephales promelas</i> mg/L LC50 static 4.3 - 8.5: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 4.62: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 4.2: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 7.97: 96 h <i>Brachydanio rerio</i> mg/L LC50 flow-through 9.9 - 20.1: 96 h <i>Brachydanio rerio</i> mg/L LC50 semi-static 4.06 - 5.75: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 4.2 - 4.8: 96 h <i>Lepomis macrochirus</i> mg/L LC50 flow-through 4.5: 96 h <i>Lepomis macrochirus</i> mg/L LC50 5.8 - 7.5: 96 h <i>Pimephales promelas</i> mg/L LC50 static 10.2 - 22.5: 96 h <i>Pimephales promelas</i> mg/L LC50 semi-static 6.2 - 9.6: 96 h <i>Pimephales promelas</i> mg/L LC50 13.5 - 18.3: 96 h <i>Poecilia reticulata</i> mg/L LC50 semi-static 10.8 - 16.6: 96 h <i>Poecilia reticulata</i> mg/L LC50 static 1.31: 96 h <i>Cyprinus carpio</i> mg/L LC50 semi-static	1.8: 48 h <i>Daphnia magna</i> mg/L EC50
Sodium benzoate 532-32-1		420 - 558: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 100: 96 h <i>Pimephales promelas</i> mg/L LC50 static	650: 48 h <i>Daphnia magna</i> mg/L EC50
Sodium Nitrite 7632-00-0		0.19: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 0.092 - 0.13: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 0.4 - 0.6: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 semi-static 0.65 - 1: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 2.3: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 20: 96 h <i>Pimephales promelas</i> mg/L LC50 static	

Persistence/Degradability

Not determined

Bioaccumulation

Not determined

Mobility

Not determined

Chemical Name	Partition Coefficient
Propane 74-98-6	2.3

N-Butane 106-97-8	2.89
Isobutane 75-28-5	2.88
Isopropyl alcohol 67-63-0	0.05
Butoxyethanol 111-76-2	0.81
Alcohol 64-17-5	-0.32
Morpholine 110-91-8	-2.55
Sodium Nitrite 7632-00-0	-3.7

Other Adverse Effects

Not determined

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

Chemical Name	California Hazardous Waste Status
Isopropyl alcohol 67-63-0	Toxic Ignitable
Alcohol 64-17-5	Toxic Ignitable
Sodium Nitrite 7632-00-0	Toxic Ignitable Reactive

14. TRANSPORT INFORMATION

Note Based on package size, product may be eligible for limited quantity exception.

DOT (each not exceeding 1 L capacity)

UN/ID No UN1950
Proper Shipping Name Aerosols
Hazard Class 2.1

IATA

UN/ID No UN1950
Proper Shipping Name Aerosols, flammable
Hazard Class 2.1

IMDG

UN/ID No UN1950
Proper Shipping Name Aerosols
Hazard Class 2.1

15. REGULATORY INFORMATION

International Inventories

Not determined

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

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sodium Nitrite 7632-00-0	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

SARA 313

Not determined

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Isopropyl alcohol - 67-63-0	67-63-0	1-5	1.0
Butoxyethanol - 111-76-2	111-76-2	1-5	1.0
Sodium Nitrite - 7632-00-0	7632-00-0	0-1	1.0

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium Nitrite 7632-00-0 (0-1)	100 lb			X

US State Regulations

Chemical Name	California Proposition 65
Alcohol - 64-17-5	Carcinogen Developmental

U.S. State Right-to-Know Regulations

Not determined

Chemical Name	New Jersey	Massachusetts	Pennsylvania
N-Butane 106-97-8	X	X	X
Propane 74-98-6	X	X	X
Isobutane 75-28-5	X	X	X
Isopropyl alcohol 67-63-0	X	X	X
Butoxyethanol 111-76-2	X	X	X
Alcohol 64-17-5	X	X	X
Morpholine 110-91-8	X	X	X
Sodium Nitrite 7632-00-0	X	X	X

16. OTHER INFORMATION**NFPA****Health Hazards**

Not determined

Flammability

Not determined

Instability

Not determined

Special Hazards

Not determined

HMIS**Health Hazards**

Not determined

Flammability

Not determined

Physical Hazards

Not determined

Personal Protection

Not determined

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Revision Note

New format

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 information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet