

Date of issue: 06/25/2014 Revision date: 06/25/2014 Version: 1.0

	Date of Issue: 06/25/2	2014 Revision date: 06/25/2014	version: 1.0	
SECTION 1: Identification of	the substance/	mixture and of the company/u	ndertaking	
1.1. Product identifier				
Product name	: PENR	AY PROFESSIONAL GLASS CLEANER	R	
Product code	: 4150			
		mixture and uses advised against		
Use of the substance/mixture	: Glass	cleaner.		
1.3. Details of the supplier of t	he safety data shee	t		
The Penray Companies, Inc. 440 Denniston Ct. Wheeling, IL 60090 T (800) 373-6729				
rotto@penray.com				
1.4. Emergency telephone num	nber			
Emergency number	CHEN	373-6729 ITREC (800) 424-9300 ITREC International +1 (703) 527-3887 2	24 hr	
SECTION 2: Hazards identifi	cation			
2.1. Classification of the subst	tance or mixture			
GHS-US classification				
Flammable Aerosol 1 Gases Under Pressure - Liquefied Ga Eye irritation 2A	as			
2.2. Label elements				
GHS-US labelling Hazard pictograms (GHS-US)	:	HS02 GHS04 GHS07	•	
Signal word (GHS-US)	: Dange			
Hazard statements (GHS-US)	: Extrem	nely flammable aerosol. Contains gas ur	ider pressure; m	nay explode if heated. Causes
Precautionary statements (GHS-US)	: Keep ; flame Wash cautio Contir	 serious eye irritation. Keep away from heat/sparks/open flames/hot surfacesNo smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Wash hands thoroughly after handling. Wear eye protection/face protection. 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. Do not expose to temperatures exceeding 50 °C/122 °F. Protect from sunlight. Store in a well-ventilated place. 		
2.3. Other hazards				
No additional information available				
SECTION 3: Composition/inf	ormation on ing	gredients		
3.1. Substance				
Not applicable				
3.2. Mixture				
Name		Product identifier	%	GHS-US classification
Isobutane		(CAS No) 75-28-5	3 - 7	Flam. Gas 1

Name	Product identifier	%	GHS-US classification
Isobutane	(CAS No) 75-28-5	3 - 7	Flam. Gas 1 Liquefied gas STOT SE 3
Acetone	(CAS No) 67-64-1	3 - 7	Flam. Liq. 2 Eye Irrit. 2A STOT SE 3



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according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Name	Product identifier	%	GHS-US classification
1-Butoxy-2-propanol	(CAS No) 5131-66-8	1 - 5	Flam. Liq. 4 Skin Irrit. 2 Eye Irrit. 2A
Isopropyl alcohol	(CAS No) 67-63-0	1 - 5	Flam. Liq. 2 Eye Irrit. 2A STOT SE 3

* The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures after inhalation	: If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: If irritation occurs, flush skin with plenty of water. Get medical attention if irritation persists.
First-aid measures after eye contact	: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, get medical attention.
First-aid measures after ingestion	: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.
4.2. Most important symptoms and effect	s, both acute and delayed
Symptoms/injuries after inhalation	: May cause respiratory tract irritation
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/injuries after ingestion	: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	Powder, water spray, foam, carbon dioxide.
Unsuitable extinguishing media	None known.
5.2. Special hazards arising from the subs	tance or mixture
Fire hazard	Extremely flammable aerosol. Products of combustion may include, and are not limited to: oxides of carbon.
Explosion hazard	Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
5.3. Advice for firefighters	
Protection during firefighting	Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Use water spray to keep fire-exposed containers cool.
SECTION 6: Accidental release measu	ires
6.1. Personal precautions, protective equi	pment and emergency procedures
General measures	Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.
6.2. Methods and material for containment	t and cleaning up
For containment	Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable
	container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
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See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.



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according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SEC	TION 7: Handling and storage	
7.1.	Precautions for safe handling	
Preca	utions for safe handling	: Keep away from sources of ignition No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid contact with skin and eyes. Avoid breathing gas/mist/vapors/spray. Do not swallow. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area.
Hygie	ne measures	: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.
7.2.	Conditions for safe storage, inclu	ding any incompatibilities
Storaç	ge conditions	 Keep locked up and out of reach of children. Do not expose ot temperatures exceeding 50°C/ 122°F. Store away from direct sunlight or other heat sources. Store in a well-ventilated place.

Specific end use(s) 7.3.

Not available.

SECTION 8: Exposure controls/personal protection			
8.1. Control parameters			
Isobutane (75-28-5)			
USA ACGIH	ACGIH STEL (ppm)	1000 ppm	
	1		
Acetone (67-64-1)			
USA ACGIH	ACGIH TWA (ppm)	500 ppm	
USA ACGIH	ACGIH STEL (ppm)	750 ppm	
USA OSHA	OSHA PEL (TWA) (mg/m³)	2400 mg/m ³	
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm	

1-Butoxy-2-propanol (5131-66-8)		
USA ACGIH	ACGIH TWA	Not applicable.
USA OSHA	OSHA PEL (TWA)	Not applicable.

Isopropyl alcohol (67-63-0)		
USA ACGIH	ACGIH TWA (ppm)	200 ppm
USA ACGIH	ACGIH STEL (ppm)	400 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	980 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	400 ppm

8.2. **Exposure controls**

Appropriate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear chemically resistant protective gloves.
Eye protection	: Safety glasses or goggles are recommended when using product.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on bas	sic physical and chemical properties	
Physical state	: Gas/Pressurized Liquid.	
Appearance	: Clear.	
Colour	: Colourless.	
Odour	: Solvent.	
Odour threshold	: No data available.	
рН	: No data available.	
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Relative evaporation rate (butylacetate=1)	: No data available.
Melting point	: No data available.
Freezing point	: No data available.
Boiling point	: No data available.
Flash point	: No data available.
Self ignition temperature	: No data available.
Decomposition temperature	: No data available.
Flammability (solid, gas)	: Flammable.
Vapour pressure	: No data available.
Relative vapour density at 20 °C	: No data available.
Relative density	: 0.998 - 0.999
Solubility	: No data available.
Log Pow	: No data available.
Log Kow	: No data available.
Viscosity, kinematic	: No data available.
Viscosity, dynamic	: No data available.
Explosive properties	: No data available.
Oxidising properties	: No data available.
Explosive limits	: No data available.

9.2. **Other information**

No additional information available.

SECTION 10: Stability and reactivity
10.1. Reactivity
No dangerous reaction known under conditions of normal use.
10.2. Chemical stability
Stable under normal storage conditions. Extremely flammable aerosol. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn.
10.3. Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid
Heat. Incompatible materials. Sources of ignition.
10.5. Incompatible materials
Strong oxidizing agents. Acids. Bases. Reducing agents.
10.6. Hazardous decomposition products
May include, and are not limited to: oxides of carbon.
SECTION 11: Toxicological information
11.1. Information on toxicological effects
Acute toxicity : Not classified

4150	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5 mg/l/4h
Isobutane (75-28-5)	
LC50 inhalation rat (mg/l)	658 mg/l/4h
Acetone (67-64-1)	
LD50 oral rat	5800 mg/kg
LC50 inhalation rat (mg/ m ³)	50100 mg/m³/8h
1-Butoxy-2-propanol (5131-66-8)	
LD50 oral rat	3300 mg/kg
LD50 dermal rat	3100 mg/kg



Safety Data Sheet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Isopropyl alcohol (67-63-0)			
LD50 oral rat	4396 mg/kg		
LD50 dermal rat	12800 mg/kg		
LD50 dermal rabbit	12870 mg/kg		
LC50 inhalation rat (mg/l)	72.6 mg/l/4h		
Skin corrosion/irritation	: Based on available data, the classification criteria are not met.		
Serious eye damage/irritation	: Causes serious eye irritation.		
Respiratory or skin sensitisation	: Based on available data, the classification criteria are not met.		
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.		
Carcinogenicity	: Based on available data, the classification criteria are not met.		
Isopropyl alcohol (67-63-0)			
IARC group	3 - Not classifiable		
Reproductive toxicity	: Based on available data, the classification criteria are not met.		
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met.		
Specific target organ toxicity (repeated exposure)	: Based on available data, the classification criteria are not met.		
Aspiration hazard	: Based on available data, the classification criteria are not met.		
Symptoms/injuries after inhalation	: May cause respiratory tract irritation		
Symptoms/injuries after skin contact	 May cause respiratory tract inflation. May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the ski 		
Symptoms/injuries after eye contact	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and		
Symptoms/injuries after ingestion	tear production, with marked redness and swelling of the conjunctiva.May be harmful if swallowed. May cause stomach distress, nausea or vomiting.		
SECTION 12: Ecological information			
2.1. Toxicity			
	: May cause long-term adverse effects in the aquatic environment.		
I2.2. Persistence and degradability	- ·		
4150			
Persistence and degradability	Not established.		
12.3. Bioaccumulative potential			
4150			
Bioaccumulative potential	Not established.		
2.4. Mobility in soil			
No additional information available			
12.5. Other adverse effects			
Effect on ozone layer	: No additional information available		
Effect on the global warming	: No known ecological damage caused by this product.		
SECTION 13: Disposal consideration	5		
13.1. Waste treatment methods			
Vaste disposal recommendations	: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.		
Additional information	: Flammable vapours may accumulate in the container. Do not incinerate closed containers.		
SECTION 14: Transport information			
n accordance with DOT			
I4.1. UN number			
JN-No.	UN1950		
14.2. UN proper shipping name			
Proper Shipping Name	: Aerosols, flammable		

Hazard Classes

EN (English)

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Hazard labels	
14.3. Additional information	
Other information	: No supplementary information available.
Special transport precautions	: Do not handle until all safety precautions have been read and understood.

5.1. US Federal regulations			
All components of this product are listed, or exe Substances Control Act (TSCA) inventory exce		on the United States Environmental Protection Agency Toxic	
Propanol, 2-butoxy-		CAS No 15821-83-7	
Acetone (67-64-1)			
EPA TSCA Regulatory Flag	T - T - indicates	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.	
Isopropyl alcohol (67-63-0)			
Listed on SARA Section 313 (Specific toxic che	emical listings)		
EPA TSCA Regulatory Flag	T - T - indicates	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.	
SARA Section 313 - Emission Reporting	1.0 %		

4150	
State or local regulations	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.
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Indication of changes	: None.	
Date of issue	: 06/25/2014	
Other information	: None.	
NFPA health hazard	: 2	
NFPA fire hazard	: 4	
NFPA reactivity	: 0	2 0

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

