

Date of issue: 03/31/2014 Revision date: 03/31/2014 Version: 1.0

SECTION 1: Identification of the subs	stance/mixture and of the company/undertaking
1.1. Product identifier	
Product name	: PENRAY NON-CHLORINATED BRAKE CLEANER
Product code	: 4720
1.2. Relevant identified uses of the subst	ance or mixture and uses advised against
Use of the substance/mixture	: Brake Cleaner.
1.3. Details of the supplier of the safety d	ata sheet
The Penray Companies, Inc. 440 Denniston Ct. 60090 Wheeling, IL T (800) 373-6729 rotto@penray.com	
1.4. Emergency telephone number	
Emergency number	: (800) 373-6729 CHEMTREC (800) 424-9300 CHEMTREC International +1 (703) 527-3887 24 hr
SECTION 2: Hazards identification	
2.1. Classification of the substance or mi	xture
GHS-US classification	
Flammable Aerosol 1 Gases Under Pressure - Compressed Gas Eye irritation 2A Reproductive toxicity 2 (developmental) Specific target organ toxicity - Single exposure 3 Specific target organ toxicity - Repeated exposure	2
2.2. Label elements	
GHS-US labelling	
Hazard pictograms (GHS-US)	: GHS02 GHS04 GHS07 GHS08
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	: Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes serious eye irritation. Suspected of damaging the unborn child. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated.
Precautionary statements (GHS-US)	: 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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Do not breathe gas/mist/vapors/spray. If exposed or concerned: Get medical advice/attention. 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 inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. Store in a well-ventilated place. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Dispose of contents and container in accordance with all local, regional, national and international regulations.
2.3. Other hazards	
No additional information available	
2.4. Unknown acute toxicity (GHS-US)	
6 % of the mixture consists of ingredient(s) of unk	nown acute toxicity.
SECTION 3: Composition/information	n on ingredients
3.1. Substance	
Not applicable	



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

Name	Product identifier	%	GHS-US classification
Acetone	(CAS No) 67-64-1	60 - 100	Flam. Liq. 2 Eye Irrit. 2A STOT SE 3
Carbon dioxide	(CAS No) 124-38-9	3 - 7	Compressed gas
Toluene	(CAS No) 108-88-3	1 - 5	Flam. Liq. 2 Acute Tox. 4 (Oral) Skin Irrit. 2 Repr. 2 STOT SE 3 STOT RE 2 Asp. Tox. 1

4.1.	Description of first aid measure	ie.	
First-a	id measures after inhalation	:	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical advice/attention if you feel unwell.
First-a	id measures after skin contact	:	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
First-a	id 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-a	id 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 immediate medical advice/attention.
4.2.	Most important symptoms and	effects,	both acute and delayed
Sympt	toms/injuries after inhalation	:	May cause drowsiness, dizziness and central nervous system depression. May cause respirator irritation.
Sympt	toms/injuries after skin contact	:	May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the ski
		:	Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Sympt	oms/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).

SECTI	ON 5: Firefighting measure	es
5.1.	Extinguishing media	
Suitable	extinguishing media	: Powder, water spray, foam, carbon dioxide.
Unsuitable extinguishing media : Do r		: Do not use a heavy water stream.
5.2.	Special hazards arising from th	e substance or mixture
Fire haz	ard	: Extremely flammable aerosol. Products of combustion may include, and are not limited to: oxide of carbon.
Explosio	on hazard	: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
5.3.	Advice for firefighters	
Protectio	on during firefighting	Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Vapours may be heavier than air and may travel along the ground to a distar ignition source and flash back. Use water spray to keep fire-exposed containers cool.

SECTION 6: Accidental release measures				
6.1.	Personal precautions, protective equipment 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 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).		
Methods	for cleaning up	: Scoop up material and place in a disposal container. Provide ventilation.		
6.3.	Reference to other sections			

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.



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

SECT	ION 7: Handling and storage	
7.1.	Precautions for safe handling	
Precau	tions 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. Do not breathe gas/mist/vapors/spray. Do not swallow. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area.
Hygien	e measures	: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.
7.2.	Conditions for safe storage, includ	ing any incompatibilities
Storage	e conditions	: Keep locked up and out of reach of children. Do not expose to temperatures exceeding 50°C/ 122°F. Store away from direct sunlight or other heat sources. Store in a well-ventilated place.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection					
8.1. Control parame	8.1. Control parameters				
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			

Carbon dioxide (124-38-9)		
USA ACGIH	ACGIH TWA (ppm)	5000 ppm
USA ACGIH	ACGIH STEL (ppm)	30000 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	9000 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	5000 ppm

Toluene (108-88-3)		
USA ACGIH	ACGIH TWA (ppm)	20 ppm
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm
USA OSHA	OSHA PEL (STEL) (ppm)	150 ppm
USA OSHA	OSHA PEL (Ceiling) (ppm)	300 ppm

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	A NIOSH approved respirator is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator
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 chemica	al properties
9.1. Information on basic physical ar	d chemical properties
Physical state	: Gas/Pressurized Liquid.
Appearance	: Clear.
Colour	: Colourless.
Odour	: Solvent.
Odour threshold	: No data available.
pH	: No data available.
Relative evaporation rate (butylacetate=1)	: No data available.
Melting point	: No data available.
Freezing point	: No data available.

8.2.

Exposure controls

EN (English)



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

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	:	0.790 - 0.796
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.
VOC (Weight %)		3% Estimated

9.2. **Other information**

No additional information available

SECTION 10: Stability and reactivity	
10.1. Reactivity	
No dangerous reaction known under conditions of	of normal use.
10.2. Chemical stability	
Stable under normal storage conditions. Extreme Do not burn.	ely flammable aerosol. Contents under pressure. Container may explode if heated. Do not punctu
10.3. Possibility of hazardous reactions	
No dangerous reaction known under conditions of	of normal use.
10.4. Conditions to avoid	
Sources of ignition. Incompatible materials.	
10.5. Incompatible materials	
Acids. Amines. Bases. Oxidizers.	
10.6. Hazardous decomposition products	
May include, and are not limited to: oxides of car	bon.
SECTION 11: Toxicological informat	ion
11.1. Information on toxicological effects	
Acute toxicity	: Not classified
4720	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5 mg/l/4h
Acetone (67-64-1)	
LD50 oral rat	5800 mg/kg
LC50 inhalation rat (mg/l)	50100 mg/m³/8h
Toluene (108-88-3)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	12124 mg/kg
LD50 dermal rabbit	8390 mg/kg
LC50 inhalation rat (mg/l)	28.1 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.
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Safety Data Sheet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

ccording to the Hazard Communication Standard (CFR2		
Carcinogenicity	: Based on available data, the classification criteria are not met.	
Toluene (108-88-3)		
IARC group	3	
Reproductive toxicity	: Suspected of damaging the unborn child.	
Specific target organ toxicity (single exposure)	: May cause drowsiness or dizziness.	
Specific target organ toxicity (repeated exposure)	: May cause damage to organs through prolonged or repeated exposure.	
Aspiration hazard	: Based on available data, the classification criteria are not met.	
Symptoms/injuries after inhalation	: May cause drowsiness, dizziness and central nervous system depression. May cause respirato irritation.	
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the sk	
Symptoms/injuries after eye contact	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking an 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.	
SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - general	: May cause long-term adverse effects in the aquatic environment.	
12.2. Persistence and degradability		
4720		
Persistence and degradability	Not established.	
12.3. Bioaccumulative potential		
4720		
Bioaccumulative potential	Not established.	
12.4. Mobility in soil		
No additional information available		
12.5. Other adverse effects		
No additional information available		
SECTION 13: Disposal consideration	ns	
13.1. Waste treatment methods		
Waste 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		
In accordance with DOT		
14.1. UN number		
JN-No.	: UN1950	
14.2. UN proper shipping name		
Proper Shipping Name	: Aerosols flammable	
Department of Transportation Hazard Classes	: 2.1	
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.	
SECTION 15: Regulatory information	n	
15.1. US Federal regulations		
Acotomo (67 64 4)		

Acetone (67-64-1)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
EPA TSCA Regulatory Flag T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.		



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Carbon dioxide (124-38-9)				
Listed on the United States TSCA (Toxic Substances Control Act) inventory				
Toluene (108-88-3)				
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)				
SARA Section 313 - Emission Reporting	1.0 %			

15.2. US State regulations

4720	
State or local regulations	WARNING: This product can expose you to chemicals including Naphthalene,which is known to the State of California to cause cancer., and Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:		
IARC	International Agency for Research on Cancer.	
	 Carcinogenic to humans; Probably carcinogenic to humans; Possibly carcinogenic to humans; Not classifiable; Probably not carcinogenic to humans. 	
NTP	National Toxicology Program.	
	 1 - Evidence of Carcinogenicity; 2 - Known Human Carcinogens; 3 - Reasonably anticipated to be Human Carcinogen; 4 - Substances delisted from report on Carcinogens; 5 - Twelfth Report - Items under consideration. 	

SECTION 16: Other information		
Indication of changes	:	None.
Date of issue	:	03/31/2014
Other information	:	None.
NFPA health hazard		2
NFPA fire hazard	:	
NFPA reactivity		- 0
NI I A ICAUNILY	•	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

