

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : PENRAY NON-CHLORINATED BRAKE CLEANER
Product code : 4020

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Brake cleaner.

1.3. Details of the supplier of the safety data sheet

The Penray Companies, Inc.
440 Denniston Ct.
Wheeling, IL 60090
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 mixture

GHS-US classification

Flammable Aerosol 1
Gases Under Pressure - Compressed Gas
Acute toxicity 3 (Dermal)
Acute toxicity 4 (Oral, Inhalation)
Skin irritation 2
Eye irritation 2A
Reproductive toxicity 2 (developmental)
Specific target organ toxicity - Single exposure 1
Specific target organ toxicity - Single exposure 3
Specific target organ toxicity - Repeated exposure 2
Aspiration hazard 1

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Toxic in contact with skin. Harmful if swallowed or if inhaled. Causes skin irritation. Causes serious eye irritation. Suspected of damaging the unborn child. Causes damage to eyes. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways.

Precautionary statements (GHS-US)

: 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. 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. Do not breathe gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. If exposed: Call a poison center/doctor. If swallowed: Immediately call a poison center/doctor. Rinse mouth. Do NOT induce vomiting. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Call a poison center/doctor if you feel unwell. 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. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place. Store locked up. Dispose of contents and container in accordance with all local, regional, national and international regulations.

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

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

7 percent of the mixture consists of ingredient(s) of unknown acute toxicity.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Acetone	(CAS No) 67-64-1	30 - 60	Flam. Liq. 2 Eye Irrit. 2A STOT SE 3
Methanol	(CAS No) 67-56-1	10 - 30	Flam. Liq. 2 Acute Tox. 3 (Oral, Dermal, Inhalation) Eye Irrit. 2B STOT SE 1
Toluene	(CAS No) 108-88-3	10 - 30	Flam. Liq. 2 Skin Irrit. 2 Repr. 2 (developmental) STOT SE 3 STOT RE 2 Asp. Tox. 1
Carbon dioxide	(CAS No) 124-38-9	3 - 7	Compressed gas
Heptane, branched, cyclic and linear	(CAS No) 426260-76-6	0.5 - 1.5	Flam. Liq. 2 Skin Irrit. 2 STOT SE 3 Asp. Tox. 1

* 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, 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-aid measures after skin contact	: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical advice/attention if you feel unwell.
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	: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth. Get immediate medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: Harmful if inhaled. May cause respiratory tract irritation. Vapors may cause narcosis with headache, difficulty breathing, lightheadedness, drowsiness, unconsciousness and possibly death.
Symptoms/injuries after skin contact	: Toxic in contact with skin. Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Other symptoms are similar to those experienced through inhalation and ingestion.
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	: Harmful if swallowed. May be fatal or cause blindness if swallowed. May cause stomach distress, nausea or vomiting. Ingestion may cause headache, dizziness, drowsiness, metabolic acidosis, coma, seizures.

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	: Do not use a heavy water stream.

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5.2. Special hazards arising from the substance or mixture

- Fire hazard : Extremely flammable aerosol. Products of combustion may include, and are not limited to: oxides of carbon, formaldehyde.
- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

5.3. Advice for firefighters

- Firefighting instructions : Burns with a colorless invisible flame. In case of fire and/or explosion do not breathe fumes.
- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Vapors may be heavier than air and may travel along the ground to a distant 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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions 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. Do not get in eyes, on skin, or on clothing. 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.
- Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities

- Storage 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 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/m ³)	2400 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
Methanol (67-56-1)		
USA ACGIH	ACGIH TWA (ppm)	200 ppm
USA ACGIH	ACGIH STEL (ppm)	250 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	260 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm
Toluene (108-88-3)		
USA ACGIH	ACGIH TWA (ppm)	20 ppm
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm
USA OSHA	OSHA PEL (Ceiling) (ppm)	300 ppm

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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/m ³)	9000 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	5000 ppm

Heptane, branched, cyclic and linear (426260-76-6)		
USA ACGIH	ACGIH TWA	Not applicable.
USA OSHA	OSHA PEL (TWA)	Not applicable.

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	: Neoprene or nitrile rubber gloves.
Eye protection	: Wear approved eye (properly fitted dust- or splash-proof chemical safety goggles) / face (face shield) protection.
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 chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Gas/Pressurized Liquid.
Appearance	: Clear.
Color	: Colorless.
Odor	: Solvent.
Odor 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.
Boiling point	: No data available.
Flash point	: No data available.
Auto-ignition temperature	: No data available.
Decomposition temperature	: No data available.
Flammability (solid, gas)	: Flammable.
Vapor pressure	: No data available.
Relative vapor density at 20 °C	: No data available.
Relative density	: 0.7825 - 0.7855
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

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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

Acids. Amines. Bases. Metals. Oxidizers. Reducing agents.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon, formaldehyde.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Toxic in contact with skin. Harmful if swallowed or if inhaled.

4020	
LD50 oral rat	>300 but ≤2000 mg/kg (Calculated using ATE values)
LD50 dermal rabbit	>200 but ≤1000 mg/kg (Calculated using ATE values)
LC50 inhalation rat	>1.0 but ≤5.0 mg/l/4h (Calculated using ATE values)

Acetone (67-64-1)	
LD50 oral rat	5800 mg/kg
LC50 inhalation rat	50100 mg/m³/8h

Methanol (67-56-1)	
LD50 oral rat	5628 mg/kg
LD50 dermal rabbit	15800 mg/kg
LC50 inhalation rat	83.2 mg/l/4h

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	28.1 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
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.

Toluene (108-88-3)	
IARC group	3 - Not classifiable

Reproductive toxicity : Suspected of damaging the unborn child.
Specific target organ toxicity (single exposure) : Causes damage to eyes. Inhalation, ingestion or skin absorption of methanol can cause significant disturbances in vision, including blindness.
Specific target organ toxicity (repeated exposure) : May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard : May be fatal if swallowed and enters airways.
Symptoms/injuries after inhalation : Harmful if inhaled. May cause respiratory tract irritation. Vapors may cause narcosis with headache, difficulty breathing, lightheadedness, drowsiness, unconsciousness and possibly death.
Symptoms/injuries after skin contact : Toxic in contact with skin. Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Other symptoms are similar to those experienced through inhalation and ingestion.
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.

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Symptoms/injuries after ingestion : Harmful if swallowed. May be fatal or cause blindness if swallowed. May cause stomach distress, nausea or vomiting. Ingestion may cause headache, dizziness, drowsiness, metabolic acidosis, coma, seizures.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

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Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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12.4. 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 considerations

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 vapors may accumulate in the container. Do not incinerate closed containers.

SECTION 14: Transport information

In accordance with DOT

14.1. UN number

UN-No. : UN1950

14.2. UN proper shipping name

Proper Shipping Name : Aerosols flammable, containing substances in Class 6.1, packing group II

Department of Transportation Hazard Classes : 2.1 (6.1)

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

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

This product is not for sale in the following states: CA, UT, NH, DE, MD

Acetone (67-64-1)

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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Methanol (67-56-1)

Listed on United States SARA Section 313

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Methanol (67-56-1)

SARA Section 313 - Emission Reporting	1.0 %
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Toluene (108-88-3)

Listed on United States SARA Section 313	
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SARA Section 313 - Emission Reporting	1.0 %
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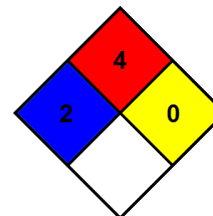
15.3. US State regulations

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State or local regulations	This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
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SECTION 16: Other information

Indication of changes	: None.
Date of issue	: 08/19/2014
Other information	: None.
NFPA health hazard	: 2
NFPA fire hazard	: 4
NFPA reactivity	: 0



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