



# Penray Non-Chlorinated Brake Cleaner

## Safety Data Sheet

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

Date of issue: 10/14/2016

Revision date: 01/14/2018

Version: 1.0

### SECTION 1: Identification

#### 1.1. Identification

Product name : Penray Non-Chlorinated Brake Cleaner  
Product code : 4520

#### 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](mailto: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: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Flam. Aerosol 1  
Press Gas - Compressed gas  
Skin Irrit. 2  
Repr. 2  
STOT SE 3  
STOT RE 2  
Asp. Tox. 1

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. Suspected of damaging fertility or the unborn child. 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) :

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. Wear protective gloves, protective clothing, eye protection, face protection. Do not breathe dust, fume, gas, mist, vapors, spray. Use only outdoors or in a well-ventilated area. If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: 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. If swallowed: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

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### 2.3. Other hazards

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%
Heptane, branched, cyclic and linear	(CAS No) 426260-76-6	60 - 100
n-Heptane	(CAS No) 142-82-5	20 - 50
Carbon dioxide	(CAS No) 124-38-9	0.5 - 5

\* 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 breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician 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. Call a physician if irritation develops and persists.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.
- First-aid measures after ingestion : IF SWALLOWED: Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

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

- Symptoms/injuries after inhalation : May cause drowsiness or dizziness. Intentional misuse of product by inhalation can result in asphyxiation or death.
- Symptoms/injuries after skin contact : Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
- Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
- Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways. Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. 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 : Do not use a heavy water stream.

### 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.
- 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 : DO NOT fight fire when fire reaches explosives. Evacuate area.
- 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.

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### 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. Isolate from fire, if possible, without unnecessary risk. Use special care to avoid static electric charges.

##### 6.1.1. For non-emergency personnel

No additional information available

##### 6.1.2. For emergency responders

No additional information available

#### 6.2. Environmental precautions

No additional information available

#### 6.3. Methods and material for containment and cleaning up

For containment : Eliminate all ignition sources if safe to do so. 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.

#### 6.4. 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

Additional hazards when processed : Hazardous waste due to potential risk of explosion.

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. 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. Handle and open container with care.

Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

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. Keep container tightly closed. Keep in fireproof place.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Heptane, branched, cyclic and linear (426260-76-6)		
Not applicable		
n-Heptane (142-82-5)		
ACGIH	ACGIH TWA (ppm)	400 ppm
ACGIH	ACGIH STEL (ppm)	500 ppm
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	2000 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	500 ppm
Carbon dioxide (124-38-9)		
ACGIH	ACGIH TWA (ppm)	5000 ppm
ACGIH	ACGIH STEL (ppm)	30000 ppm
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	9000 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	5000 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.

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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. 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
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: 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
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: 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

Extremely flammable aerosol. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

#### 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. Sparks. Open flame. Direct sunlight. Overheating.

#### 10.5. Incompatible materials

Strong oxidizing agents. Strong reducing agents.

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### 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

4520	
LD50 oral rat	> 2000 mg/kg (Calculated acute toxicity estimate)
LD50 dermal rabbit	> 2000 mg/kg (Calculated acute toxicity estimate)
LC50 inhalation rat	> 5 mg/l/4h (Calculated acute toxicity estimate)

n-Heptane (142-82-5)	
LD50 dermal rabbit	3000 mg/kg
LC50 inhalation rat	103 g/m <sup>3</sup> /4h

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Based on available data, the classification criteria are not met.
Respiratory or skin sensitization	: 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.
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: May cause drowsiness or dizziness.
STOT-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	: May cause drowsiness or dizziness. Intentional misuse of product by inhalation can result in asphyxiation or death.
Symptoms/injuries after skin contact	: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways. Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. 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.

n-Heptane (142-82-5)	
LC50 fish 1	375.0 mg/l (96 h - Cichlid fish)

### 12.2. Persistence and degradability

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Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.

n-Heptane (142-82-5)	
Partition coefficient n-octanol/water	4.66

Carbon dioxide (124-38-9)	
BCF fish 1	(no bioaccumulation)

### 12.4. Mobility in soil

No additional information available

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### 12.5. Other adverse effects

Effect on the global warming : No known effects from this product.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Handle empty containers with care because residual vapors are flammable. 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 : Handle empty containers with care because residual vapors are flammable. Pressurized container: Do not pierce or burn, even after use.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1950 Aerosols (flammable), 2.1

UN-No.(DOT) : UN1950

Proper Shipping Name (DOT) : Aerosols, flammable

Class (DOT) : 2.1

Hazard labels (DOT) : 2.1



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 CT, DC, IL, IN, MA, ME, MI, NJ, NY, OH, PA, VA

### n-Heptane (142-82-5)

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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### 15.2. US State regulations

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer, developmental and/or reproductive harm

## SECTION 16: Other information

Date of issue : 10/14/2016

Revision date : 10/14/2016

Other information : None.

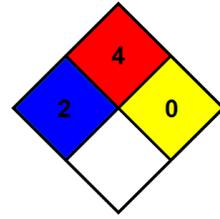
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NFPA health hazard	:	2
NFPA fire hazard	:	4
NFPA reactivity	:	0



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