

# SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

## 1. Identification

**Product identifier:** NON-CHLORINATED BRAKE CLEANER

**Other means of identification**

**SDS number:** RE1000039890

**Recommended restrictions**

**Recommended use:** Cleaner

**Restrictions on use:** Not known.

**Manufacturer/Importer/Distributor Information**

**Manufacturer**

Company Name: The Penray Companies, Inc.  
Address: 2651 Warrenville Rd., Ste. 300  
Downers Grove, IL 60515  
US  
Telephone: 800-373-6729

**Emergency telephone number:** 1-800-424-9300

## 2. Hazard(s) identification

### Hazard Classification

**Physical Hazards**

Flammable aerosol Category 1

**Health Hazards**

Serious Eye Damage/Eye Irritation Category 2A  
Toxic to reproduction Category 2  
Specific Target Organ Toxicity -  
Single Exposure Category 3  
(Narcotic effect.)  
Specific Target Organ Toxicity -  
Repeated Exposure Category 2

**Environmental Hazards**

Acute hazards to the aquatic  
environment Category 3

### Label Elements

**Hazard Symbol:**



**Signal Word:**

Danger

**Hazard Statement:** Extremely flammable aerosol.  
Causes serious eye irritation.  
Suspected of damaging fertility or the unborn child.  
May cause drowsiness or dizziness.  
May cause damage to organs through prolonged or repeated exposure.  
Harmful to aquatic life.

**Precautionary Statements**

**Prevention:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid release to the environment.

**Response:** IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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. Call a POISON CENTER/doctor if you feel unwell.

**Storage:** Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store locked up. Store in a well-ventilated place. Keep container tightly closed.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Hazard(s) not otherwise classified (HNOC):** None.

**3. Composition/information on ingredients**

**Mixtures**

Chemical Identity	CAS number	Content in percent (%)*
2-Propanone	67-64-1	50 - <100%
Carbon dioxide	124-38-9	5 - <10%
Benzene, methyl-	108-88-3	1 - <3%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

**4. First-aid measures**

**Description of necessary first-aid measures**

**Inhalation:** Move to fresh air.

**Skin Contact:** Wash skin thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

**Ingestion:** Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

**Personal Protection for First-aid Responders:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**Most important symptoms/effects, acute and delayed**

**Symptoms:** No data available.

**Hazards:** No data available.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** Get medical attention if symptoms occur.

**5. Fire-fighting measures**

**General Fire Hazards:** Use water spray to keep fire-exposed containers cool. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:** Vapors may travel considerable distance to a source of ignition and flash back.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind.

**Accidental release measures:** Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk.

**Methods and material for containment and cleaning up:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

**Environmental Precautions:** Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer.

**7. Handling and storage****Handling**

**Technical measures (e.g. Local and general ventilation):** No data available.

**Safe handling advice:** Avoid contact with eyes. Wash hands thoroughly after handling. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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 handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required.

**Contact avoidance measures:** No data available.

**Storage**

**Safe storage conditions:** Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Store locked up. Aerosol Level 2

**Safe packaging materials:** No data available.

**Storage Temperature:** No data available.

**8. Exposure controls/personal protection****Control Parameters****Occupational Exposure Limits**

Chemical Identity	Type	Exposure Limit Values	Source
2-Propanone	STEL	1,000 ppm 2,400 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	PEL	1,000 ppm 2,400 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	250 ppm	US. ACGIH Threshold Limit Values, as amended
	TWA	750 ppm 1,800 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	500 ppm	US. ACGIH Threshold Limit Values, as amended
Carbon dioxide	REL	250 ppm 590 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	TWA	5,000 ppm	US. ACGIH Threshold Limit Values, as amended
	STEL	30,000 ppm	US. ACGIH Threshold Limit Values, as amended
	STEL	30,000 ppm 54,000 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	REL	5,000 ppm 9,000 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Benzene, methyl-	PEL	5,000 ppm 9,000 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	10,000 ppm 18,000 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	30,000 ppm 54,000 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	150 ppm 560 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	REL	100 ppm 375 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	TWA	100 ppm 375 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	Ceiling	300 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000), as amended
TWA	20 ppm	US. ACGIH Threshold Limit Values, as amended	
TWA	200 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000), as amended	
MAX. CONC	500 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000), as amended	
STEL	150 ppm 560 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended	

**Biological Limit Values**

Chemical Identity	Exposure Limit Values	Source
2-Propanone (acetone: Sampling time: End of shift.)	25 mg/l (Urine)	ACGIH BEL
Benzene, methyl- (toluene: Sampling time: End of shift.)	0.03 mg/l (Urine)	ACGIH BEL
Benzene, methyl- (o-Cresol, with hydrolysis: Sampling time: End of shift.)	0.3 mg/g (Creatinine in urine)	ACGIH BEL
Benzene, methyl- (toluene: Sampling time: Prior to last shift of work week.)	0.02 mg/l (Blood)	ACGIH BEL

**Appropriate Engineering Controls** No data available.

### Individual protection measures, such as personal protective equipment

**Eye/face protection:** Wear safety glasses with side shields (or goggles).

#### Skin Protection

**Hand Protection:** No data available.

**Skin and Body Protection:** No data available.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:** Avoid contact with eyes. Observe good industrial hygiene practices. When using do not smoke. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

## 9. Physical and chemical properties

### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	Spray Aerosol
<b>Color:</b>	No data available.
<b>Odor:</b>	No data available.
<b>Odor Threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Freezing point:</b>	No data available.
<b>Boiling Point:</b>	No data available.
<b>Flash Point:</b>	Estimated 17 °C
<b>Evaporation Rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	4,481 - 5,171 hPa (20 °C)
<b>Vapor density (air=1):</b>	No data available.
<b>Density:</b>	No data available.
<b>Relative density:</b>	No data available.
<b>Solubility in Water:</b>	No data available.
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Self Ignition Temperature:</b>	No data available.
<b>Decomposition Temperature:</b>	No data available.
<b>Kinematic viscosity:</b>	No data available.
<b>Dynamic viscosity:</b>	No data available.
<b>Explosive properties:</b>	No data available.
<b>Oxidizing properties:</b>	No data available.

## 10. Stability and reactivity

**Reactivity:** No data available.

**Chemical Stability:** Material is stable under normal conditions.

**Possibility of hazardous reactions:** No data available.

**Conditions to avoid:** Avoid heat or contamination.

**Incompatible Materials:** No data available.

**Hazardous Decomposition Products:** No data available.

## 11. Toxicological information

### Information on likely routes of exposure

**Inhalation:** No data available.

**Skin Contact:** No data available.

**Eye contact:** No data available.

**Ingestion:** No data available.

### Symptoms related to the physical, chemical and toxicological characteristics

**Inhalation:** No data available.

**Skin Contact:** No data available.

**Eye contact:** No data available.

**Ingestion:** No data available.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

##### Oral

**Product:** Not classified for acute toxicity based on available data.

##### Dermal

**Product:** Not classified for acute toxicity based on available data.

##### Inhalation

**Product:** Not classified for acute toxicity based on available data.

#### Repeated dose toxicity

**Product:** No data available.

##### Components:

2-Propanone NOAEL (Rat(Male), Oral, 13 Weeks): 10,000 ppm(m) Oral Experimental result, Key study

Benzene, methyl- LOAEL (Rat(Female, Male), Oral, 13 Weeks): 1,250 mg/kg (Target Organ(s): Liver, Kidney) Oral Experimental result, Key study  
NOAEL (Rat(Female, Male), Inhalation): 625 ppm(m) Inhalation Experimental result, Key study  
NOAEL (Rat(Female, Male), Inhalation - vapor): 2,355 mg/l Inhalation Experimental result, Key study

#### Skin Corrosion/Irritation

**Product:** No data available.

##### Components:

2-Propanone in vivo (Rabbit): Not irritant

Benzene, methyl- in vivo (Rabbit): Irritating

#### Serious Eye Damage/Eye Irritation

**Product:** No data available.

**Components:**

2-Propanone	Irritating. Rabbit, 24 hrs: Minimum grade of severe eye irritant
Benzene, methyl-	Rabbit, 24 - 72 hrs: Not irritating

**Respiratory or Skin Sensitization**

**Product:** No data available.

**Components:**

2-Propanone	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Benzene, methyl-	Skin sensitization:, in vivo (Guinea pig): Non sensitising

**Carcinogenicity**

**Product:** No data available.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:**

No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**

**Product:** No data available.

**In vivo**

**Product:** No data available.

**Reproductive toxicity**

**Product:** No data available.

**Components:**

Benzene, methyl-	Suspected of damaging fertility or the unborn child.
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**Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

**Components:**

2-Propanone	Inhalation - vapor: Narcotic effect. - Category 3 with narcotic effects.
Benzene, methyl-	Inhalation - vapor: Narcotic effect. - Category 3 with narcotic effects.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Components:**

Benzene, methyl-	Category 2
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**Target Organs**

Specific Target Organ Toxicity - Single Exposure: Narcotic effect.

**Aspiration Hazard**

**Product:** No data available.

**Components:**

Benzene, methyl-	May be fatal if swallowed and enters airways.
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**Other effects:** No data available.

## 12. Ecological information

### Ecotoxicity:

#### Acute hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Components:

2-Propanone LC 50 (Oncorhynchus mykiss, 96 h): 5,540 mg/l Experimental result, Key study

Benzene, methyl- LC 50 (Oncorhynchus kisutch, 96 h): 5.5 mg/l Experimental result, Key study

##### Aquatic Invertebrates

**Product:** No data available.

##### Components:

2-Propanone LC 50 (Daphnia pulex, 48 h): 8,800 mg/l Experimental result, Key study

Benzene, methyl- LC 50 (Water flea (Daphnia magna), 48 h): 54.6 - 174.7 mg/l Mortality  
LC 50 (Ceriodaphnia dubia, 2 d): 3.78 mg/l Experimental result, Key study

#### Chronic hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Components:

Benzene, methyl- NOAEL (Oncorhynchus kisutch): 1.39 mg/l Experimental result, Key study  
LOAEL (Oncorhynchus kisutch): 2.77 mg/l Experimental result, Key study

##### Aquatic Invertebrates

**Product:** No data available.

##### Components:

2-Propanone LOAEL (Daphnia magna): 2,212 mg/l Experimental result, Key study  
NOAEL (Daphnia magna): 2,212 mg/l Experimental result, Key study

Benzene, methyl- LOAEL (Ceriodaphnia dubia): 2.76 mg/l Experimental result, Key study  
NOAEL (Ceriodaphnia dubia): 0.74 mg/l Experimental result, Key study

##### Toxicity to Aquatic Plants

**Product:** No data available.

### Persistence and Degradability

#### Biodegradation

**Product:** No data available.

##### Components:

2-Propanone 90.9 % (28 d) Detected in water. Experimental result, Key study

Benzene, methyl- 100 % (14 d) Detected in water. Experimental result, Weight of Evidence study  
86 % Detected in water. Experimental result, Weight of Evidence study

#### BOD/COD Ratio

**Product:** No data available.

### Bioaccumulative potential

#### Bioconcentration Factor (BCF)

**Product:** No data available.

#### Components:

2-Propanone Haddock, adult, Bioconcentration Factor (BCF): 0.69 Aquatic sediment  
Experimental result, Not specified

Benzene, methyl- Leuciscus idus, Bioconcentration Factor (BCF): 90 Aquatic sediment  
Experimental result, Key study

#### Partition Coefficient n-octanol / water (log Kow)

**Product:** No data available.

**Mobility in soil:** No data available.

#### Components:

2-Propanone No data available.

Carbon dioxide No data available.

Benzene, methyl- No data available.

**Other adverse effects:** Harmful to aquatic organisms.

### 13. Disposal considerations

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Contaminated Packaging:** No data available.

### 14. Transport information

#### DOT

UN Number: UN 1950  
UN Proper Shipping Name: Aerosols, flammable  
Transport Hazard Class(es)  
Class: 2.1  
Label(s): –  
EmS No.:  
Packing Group: –  
Special precautions for user: Not regulated.

#### IATA

UN Number: UN 1950  
UN Proper Shipping Name: Aerosols, flammable  
Transport Hazard Class(es):  
Class: 2.1  
Label(s): –  
Packing Group: –  
Special precautions for user: Not regulated.  
Other information  
Passenger and cargo aircraft: Allowed. 203  
Cargo aircraft only: Allowed. 203

## IMDG

UN Number:	UN 1950
UN Proper Shipping Name:	Aerosols, flammable
Transport Hazard Class(es)	
Class:	2.1
Label(s):	–
EmS No.:	F-D, S-U
Packing Group:	–
Special precautions for user:	Not regulated.

The classification shown in this section may be eligible for use of an exception, such as "Limited Quantity", per the dangerous goods regulations. The shipper of this product should consult the applicable mode's regulation for the UN number displayed above to determine if any exceptions are available and may be utilized, at the shipper's discretion.

## 15. Regulatory information

### US Federal Regulations

**Restrictions on use:** Not known.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

**US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)**

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended**

None present or none present in regulated quantities.

### CERCLA Hazardous Substance List (40 CFR 302.4):

#### Chemical Identity

ACETONE

BENZENE, METHYL-

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### **Hazard categories**

Flammable (gases, aerosols, liquids, or solids), Serious eye damage or eye irritation, Reproductive toxicity, Specific target organ toxicity (single or repeated exposure)

**US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances**

None present or none present in regulated quantities.

**US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required**

#### Chemical Identity

Benzene, methyl-

#### % by weight

1.0%

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

### US State Regulations

#### **US. California Proposition 65**

For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**US. New Jersey Worker and Community Right-to-Know Act**  
**Chemical Identity**

2-Propanone  
Carbon dioxide  
Benzene, methyl-

**US. Massachusetts RTK - Substance List**

No ingredient regulated by MA Right-to-Know Law present.

**US. Pennsylvania RTK - Hazardous Substances**

**Chemical Identity**

2-Propanone  
Carbon dioxide  
Benzene, methyl-

**US. Rhode Island RTK**

No ingredient regulated by RI Right-to-Know Law present.

**International regulations**

**Montreal protocol**

2-Propanone

**Stockholm convention**

2-Propanone

**Rotterdam convention**

2-Propanone

**Kyoto protocol**

**Inventory Status:**

Australia AICS	On or in compliance with the inventory
Canada DSL Inventory List	On or in compliance with the inventory
Canada NDSL Inventory	Not in compliance with the inventory.
Ontario Inventory	On or in compliance with the inventory
China Inv. Existing Chemical Substances	On or in compliance with the inventory
Japan (ENCS) List	On or in compliance with the inventory
Japan ISHL Listing	On or in compliance with the inventory
Japan Pharmacopoeia Listing	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI)	On or in compliance with the inventory
Mexico INSQ	On or in compliance with the inventory
New Zealand Inventory of Chemicals	On or in compliance with the inventory
Philippines PICCS	On or in compliance with the inventory
Taiwan Chemical Substance Inventory	On or in compliance with the inventory
US TSCA Inventory	On or in compliance with the inventory
EINECS, ELINCS or NLP	Not in compliance with the inventory.

**16. Other information, including date of preparation or last revision**

**Issue Date:** 08/03/2021

**Revision Information:** No data available.

**Version #:** 1.0

**Further Information:** No data available.

**Disclaimer:** This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.