



# PENRAY PLUS™ TIRE FIX PLUS

## Safety Data Sheet

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

Date of issue: 09/05/2014

Revision date: 09/05/2014

Version: 1.0

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

#### 1.1. Product identifier

Product name : PENRAY PLUS™ TIRE FIX PLUS  
Product code : 80859, 80860, 80862, 80865

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

Use of the substance/mixture : Non-Flammable Tire Inflator.

#### 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: Hazards identification

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

##### GHS-US classification

Gases Under Pressure - Liquefied Gas  
Skin irritation 2  
Eye irritation 2A

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Warning  
Hazard statements (GHS-US) : Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation.  
Precautionary statements (GHS-US) : Wash hands thoroughly after handling. Wear protective gloves/eye protection/face protection. 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 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. Store in a well-ventilated place.

#### 2.3. Other hazards

No additional information available

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

3 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
1,1,1,2-Tetrafluoroethane	(CAS No) 811-97-2	10 - 30	Liquefied gas
1-Butoxy-2-propanol	(CAS No) 5131-66-8	3 - 7	Flam. Liq. 4 Skin Irrit. 2 Eye Irrit. 2A

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Name	Product identifier	%	GHS-US classification
Ammonium hydroxide	(CAS No) 1336-21-6	0.1 - 1	Acute Tox. 4 (Oral) Skin Corr. 1B STOT SE 3
Poly(oxy-1,2-ethanediy), .alpha.-undecyl-.omega.-hydroxy-	(CAS No) 34398-01-1	0.1 - 1	Acute Tox. 4 (Oral) Eye Dam. 1
Sodium nitrite	(CAS No) 7632-00-0	0.1 - 1	Ox. Sol. 3 Acute Tox. 3 (Oral) Eye Irrit. 2A

\* 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. 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 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 effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause respiratory tract irritation. 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 : 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 substance or mixture

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon, hydrogen fluoride, halogen acids.
- Explosion hazard : Contains gas under pressure; may explode if heated.

#### 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 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. Ruptured cylinders may rocket.

#### 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.

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Keep away from heat, sparks, and flame. Pressurized container: Do not pierce or burn, even after use. Avoid contact with skin and eyes. Do not swallow. Avoid breathing gas/mist/vapors/spray. 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 out of the reach of children. Store in a well-ventilated place. Store away from direct sunlight or other heat sources.

#### 7.3. Specific end use(s)

Not available.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

1,1,1,2-Tetrafluoroethane (811-97-2)		
USA ACGIH	ACGIH TWA	Not applicable.
USA OSHA	OSHA PEL (TWA)	Not applicable.
1-Butoxy-2-propanol (5131-66-8)		
USA ACGIH	ACGIH TWA	Not applicable.
USA OSHA	OSHA PEL (TWA)	Not applicable.
Ammonium hydroxide (1336-21-6)		
USA ACGIH	ACGIH TWA	Not applicable.
USA OSHA	OSHA PEL (TWA)	Not applicable.
Poly(oxy-1,2-ethanediyl), .alpha.-undecyl-.omega.-hydroxy- (34398-01-1)		
USA ACGIH	ACGIH TWA	Not applicable.
USA OSHA	OSHA PEL (TWA)	Not applicable.
Sodium nitrite (7632-00-0)		
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 : Wear chemically resistant protective gloves.
- Eye protection : Wear eye protection.
- 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 : Opaque
- Color : Orange
- Odor : Ammonia
- Odor threshold : No data available

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pH	: 10.5 – 11.0
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)	: Not flammable
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 1.00 - 1.05
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. 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.

### 10.5. Incompatible materials

Metals.

### 10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon, hydrogen fluoride, halogen acids.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

<b>80859, 80860, 80862, 80865</b>	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	> 5 mg/l/4h
<b>1,1,1,2-Tetrafluoroethane (811-97-2)</b>	
LC50 inhalation rat	1500 g/m <sup>3</sup> /4h
<b>1-Butoxy-2-propanol (5131-66-8)</b>	
LD50 oral rat	3300 mg/kg
LD50 dermal rat	3100 mg/kg
<b>Ammonium hydroxide (1336-21-6)</b>	
LD50 oral rat	350 mg/kg

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Sodium nitrite (7632-00-0)	
LD50 oral rat	180 mg/kg
LC50 inhalation rat	5.5 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.
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. 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	: 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.

## SECTION 12: Ecological information

### 12.1. Toxicity

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

### 12.2. Persistence and degradability

#### 80859, 80860, 80862, 80865

Persistence and degradability : Not established.

### 12.3. Bioaccumulative potential

#### 80859, 80860, 80862, 80865

Bioaccumulative potential : Not established.

### 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.

## 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, non-flammable

Department of Transportation Hazard Classes : 2.2

Hazard labels :



### 14.3. Additional information

Other information : No supplementary information available.

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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 except for:

Propanol, 2-butoxy-	CAS No 15821-83-7
Acrolein	CAS No 25314-61-8

#### Sodium nitrite (7632-00-0)

Listed on United States SARA Section 313

EPA TSCA Regulatory Flag	S - S - indicates a substance that is identified in a proposed or final Significant New Uses Rule.
SARA Section 313 - Emission Reporting	1.0 %

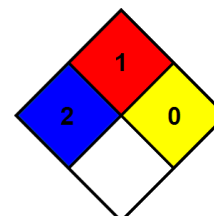
#### 15.2. US State regulations

#### 80859, 80860, 80862, 80865

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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### SECTION 16: Other information

Indication of changes : None.  
Date of issue : 09/05/2014  
Other information : None.  
  
NFPA health hazard : 2  
NFPA fire hazard : 1  
NFPA reactivity : 0



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