

SAFETY DATA SHEET

Mucolyse

1. Identification of the substance/preparation and company/undertaking

Identification of the substance or preparation

Product name : Mucolyse **Code**
Trade name : Mucolyse: PL701
Use of the substance/preparation : Mucolyse is a sputum liquefying agent used to digest and thin out the sputum, thus enhancing the isolation of organisms responsible for chronic lung disease.

Company/undertaking identification

Supplier/Manufacturer : Pro-Lab Diagnostics, 20 Mural Street, Unit 4, Richmond Hill, ON, Canada L4B 1K3
Tel: +1-905-731-0300 Fax: +1-905-731-0206 www.pro-lab.com
Emergency telephone number : +44 (0)151 353 1613 - Monday to Friday 9:00 am to 5:00 pm.
+44 (0)7714 429 646 - Outside the above hours.

2. Composition/information on ingredients

Substance/preparation : Preparation

Ingredient name	CAS number	%	EC number	Classification
Phosphoric acid, sodium salt	7558-79-4	40 - 60	231-448-7	Xi; R36/37/38
2,3-Butanediol, 1,4-dimercapto-, (r*,r*)-	3483-12-3	10 - 13	222-468-7	Xn; R20/21/22 Xi; R36/37/38
See section 16 for the full text of the R-phrases declared above				

Occupational exposure limits, if available, are listed in section 8.

3. Hazards identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Xi; R36/37/38
Human health hazards : Irritating to eyes, respiratory system and skin.
See section 11 for more detailed information on health effects and symptoms.

4. First-aid measures

First-aid measures

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.

Ingestion : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

Skin contact : Wash with soap and water. Get medical attention if irritation occurs.

Eye contact : Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if irritation occurs.

See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

- Extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Special exposure hazards** : No specific hazard.
- Hazardous thermal decomposition products** : These products are carbon oxides, sulphur oxides, phosphates. Some metallic oxides.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

- Personal precautions** : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.
- Environmental precautions and clean-up methods** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
If emergency personnel are unavailable, vacuum or carefully scoop up spilt material and place in an appropriate container for disposal by incineration. Avoid creating dusty conditions and prevent wind dispersal.

Note: see section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and storage

- Handling** : Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Avoid breathing dust. Wash thoroughly after handling.
- Storage** : Keep container tightly closed. Store between 2°C (36°F) to 8°C (46°F).
- Packaging materials**
- Recommended** : Use original container.
- Specific uses** : Not available.

8. Exposure controls/personal protection

Ingredient name

Phosphoric acid, sodium salt

Occupational exposure limits

EU OEL (Europe).

TWA: 10 mg/m³ 8 hour/hours. Form: Particulate.

TWA: 3 mg/m³ 8 hour/hours. Form: Respirable

Exposure controls

Occupational exposure controls

- : Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Hand protection

- : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Recommended : Disposable vinyl gloves.



Eye protection

- : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Recommended: Safety glasses.



Skin protection

- : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Body: Recommended: Lab coat.

9. Physical and chemical properties

General information

Appearance

Physical state : Solid.

Important health, safety and environmental information

pH : Basic.

- Melting point** : Weighted average: 808.14°C (1486.7°F)
- Flash point** : The lowest known value is Closed cup: >109°C (228.2°F). (Pensky-Martens.). (2,3-Butanediol, 1,4-dimercapto-, (r*,r*)-)
- Vapour pressure** : The highest known value is <0.01 kPa (<0.1 mm Hg) (at 20°C) (Phosphoric acid, sodium salt).
- Relative density** : Weighted average: 1.52 g/cm³
- Solubility** : Soluble in cold water, hot water.
- Vapour density** : The highest known value is 5.3 (Air = 1) (2,3-Butanediol, 1,4-dimercapto-, (r*,r*)-).

Other information

10. Stability and reactivity

- Stability** : The product is stable.
- Materials to avoid** : Reactive with oxidizing materials, acids and alkalis.
- Hazardous decomposition products** : These products are carbon oxides, sulphur oxides, phosphates. Some metallic oxides.

11. Toxicological information

Potential acute health effects

- Inhalation** : Irritating to respiratory system.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : Irritating to skin.
- Eye contact** : Irritating to eyes.

Acute toxicity

<u>Ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Phosphoric acid, sodium salt	LD50	>2000 mg/kg	Oral	Rat
2,3-Butanediol, 1,4-dimercapto-, (r*,r*)-	LD50	>5000 mg/kg	Dermal	Rabbit
	LD50	400 mg/kg	Oral	Rat

- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Skin** : No known significant effects or critical hazards.
- Target organs** : Contains material which causes damage to the following organs: mucous membranes, skin.
- Other adverse effects** : Not available.

12. Ecological information

- Mobility** : Not available.
- Other adverse effects** : No known significant effects or critical hazards.

13. Disposal considerations

- Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
- Waste classification** : Not applicable.
- European waste catalogue (EWC)** : Not available.
- Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

14. Transport information

International transport regulations

Classification: ADR/ADNR/IMDG/IATA: Not regulated.

Label: Not applicable.

Additional information

15. Regulatory information

EU regulations

Hazard symbol/symbols :



Irritant

Risk phrases : R36/37/38- Irritating to eyes, respiratory system and skin.

Contains : 2,3-Butanediol, 1,4-dimercapto-, (r*,r*)- 222-468-7

Product use : Classification and labelling have been performed according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and the intended use.
- Industrial applications.

EU statistical classification (Tariff Code) : 32089091

16. Other information

Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK) : R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.
R36/37/38- Irritating to eyes, respiratory system and skin.

Full text of classifications referred to in sections 2 and 3 - United Kingdom (UK) : Xn - Harmful
Xi - Irritant

Training advice : Not available.

Recommended use and restrictions : Not available.

Further information : Not available.

Key data sources : Not available.

Revision comments : Not available.

History

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Version : 1

Notice to reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.