SAFETY DATA SHEET



MUCINEX® CHILDREN'S Stuffy Nose & Cold - Mixed Berry

1. Product and company identification

Product name : MUCINEX® CHILDREN'S Stuffy Nose & Cold - Mixed Berry

Distributed by : Reckitt Benckiser LLC.

Morris Corporate Center IV

399 Interpace Parkway (P.O. Box 225) Parsippany, New Jersey 07054-0225

+1 973 404 2600

Emergency telephone number (Medical)

: 1-800-338-6167

Emergency telephone number (Transport)

: 1-800-424-9300 (U.S. & Canada) CHEMTREC

Outside U.S. and Canada (North America), call Chemtrec:703-527-3887

Website: http://www.rbnainfo.com

Product use : Expectorant and Cough Suppressant

This SDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is greater potential for large-scale or prolonged exposure, in accordance with the requirements of USDOL Occupational Safety and Health Administration.

This SDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulations, and shown in Section 15 of this SDS.

SDS # : D0241603 v2.0 **Formulation #**: : FF0329254 v2.0 FF0256356 v6.0

2. Hazards identification

Classification of the substance or mixture

: SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B

GHS label elements

Hazard pictograms : Not applicable.

Signal word : Warning

Hazard statements: Causes eye irritation.

Precautionary statements

General: Keep out of reach of children.

Prevention: Wear eye or face protection. Wash hands thoroughly after handling.

Response : 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 attention.

Storage : Not applicable.

Disposal : Not applicable.

Code # : D0241603 v2.0 SDS # : D0241603 v2.0 Date of issue : 20/10/2014. 1/10

2. Hazards identification

Supplemental label

elements

: None known.

Hazards not otherwise

: None known.

classified

3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
glycerol	10 - 15	56-81-5
guaifenesin	1 - 2.5	93-14-1
Citric acid	1 - 2.5	77-92-9
Morphinan, 3-methoxy-17-methyl-, hydrobromide, monohydrate,(9.alpha.,13. alpha.,14.alpha.)-	0.1 - 1.0	6700-34-1
phenylephrine hydrochloride	0.1 - 1.0	61-76-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

Description of necessary first aid measures

Eye contact: In case of contact with eyes, rinse immediately with plenty of water. If irritation persists,

get medical attention.

In the event of any complaints or symptoms, avoid further exposure. Maintain an open

airway. Get medical attention if adverse health effects persist or are severe.

Skin contact : In the event of any complaints or symptoms, avoid further exposure. Rinse skin with

water. Get medical attention if symptoms occur.

Ingestion: Wash out mouth with water. Get medical attention if adverse health effects persist or

are severe. Do not induce vomiting. If affected person is conscious, give plenty of water

to drink.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes eye irritation.

Inhalation: No known significant effects or critical hazards.Skin contact: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

irritation watering redness

Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically.

Code # : D0241603 v2.0 SDS # : D0241603 v2.0 Date of issue : 20/10/2014. 2/10

4. First aid measures

Specific treatments

: No specific treatment.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: None known.

Specific hazards arising from the chemical

: No specific fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:

carbon dioxide carbon monoxide

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

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, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container.

Large spill

Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See section 13 for waste disposal information.

: D0241603 v2.0 : D0241603 v2.0 Code # SDS# **Date of issue** : 20/10/2014. 3/10

7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Avoid contact with eyes, skin and clothing. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

including any incompatibilities

Conditions for safe storage, : Store between the following temperatures: 15 to 40°C (59 to 104°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Control

Occupational exposure limits

Ingredient name	Exposure limits
	OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 10 mg/m³ 8 hours. Form: Total dust OSHA PEL (United States, 2/2013). TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 15 mg/m³ 8 hours. Form: Total dust

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection **Skin protection Hand protection**

: If operating conditions cause high dust concentrations to be produced, use dust goggles.

: 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.

Body 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.

Code # : D0241603 v2.0 SDS# : D0241603 v2.0 **Date of issue** : 20/10/2014. 4/10

8. Exposure controls/personal protection

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: None required. However, use of adequate ventilation is good industrial practice.

9. Physical and chemical properties

Appearance

Physical state : Liquid.

: Brownish-red. Color

Odor : Fruity.

Odor threshold : Not available.

pН : 2.3 to 3 [Conc. (% w/w): 100%]

Melting point Not available. **Boiling point** : Not available. Flash point Not available. **Evaporation rate** : Not available. Flammability (solid, gas) : Not available.

Lower and upper explosive

(flammable) limits

: Not available.

Vapor pressure : Not available. Vapor density : Not available. **Relative density** Not available. Not available. Solubility Partition coefficient: n-: Not available.

octanol/water

Auto-ignition temperature : Not available. **Decomposition temperature** : Not available. : Not available. **Viscosity**

10. Stability and reactivity

Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

: The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur. Polymerization. : There are no data available on the mixture itself.

Conditions to avoid

: No specific data.

Incompatible materials

: Do not use with other products.

Hazardous decomposition products

: Hazardous decomposition products : carbon oxides , Various Organic chemicals.

Code # : D0241603 v2.0 SDS# : D0241603 v2.0 **Date of issue** : 20/10/2014. 5/10

11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
glycerol	LD50 Oral		12600 mg/kg	-
guaifenesin	LD50 Oral	Rat	1510 mg/kg	-
Citric acid	LD50 Oral	Rat	3 g/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
Citric acid	Eyes - Severe irritant	Rabbit	-	24 hours 750 Micrograms	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate irritant	Rabbit	-	0.5 Mililiters	-

Conclusion/Summary

Eyes : Irritating to eyes.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely

routes of exposure

: Not available.

Potential acute health effects

Eye contact : Causes eye irritation.

Inhalation : No known significant effects or critical hazards.
 Skin contact : No known significant effects or critical hazards.
 Ingestion : No known significant effects or critical hazards.

11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

irritation watering redness

Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.
 Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.
 Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	66105.9 mg/kg

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Citric acid	, 5	Crustaceans - Carcinus maenas - Adult	48 hours

Persistence and degradability

Not available.

12. Ecological information

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
glycerol guaifenesin Citric acid	-1.76 1.39 -1.8	-	low low

Mobility in soil

Soil/water partition coefficient (K_{oc})

: Not available.

Other adverse effects : No known significant effects or critical hazards.

13. Disposal considerations

Disposal methods

: Waste packaging should be recycled. Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport information

Not a DOT controlled material (United States). Not a TDG-controlled material. This preparation is not classified as dangerous according to international transport regulations (ADR/RID, IMDG or ICAO/IATA).

15. Regulatory information

U.S. Federal regulations

: TSCA 4(a) proposed test rules: 1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): Not determined. Clean Water Act (CWA) 311: sodium hydroxide

Clean Air Act Section 112

(b) Hazardous Air Pollutants (HAPs)

: Not listed

Clean Air Act Section 602

: Not listed

Class I Substances

Clean Air Act Section 602

: Not listed

Class II Substances

DEA List I Chemicals

: Not listed

(Precursor Chemicals)

DEA List II Chemicals

: Not listed

(Essential Chemicals)

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Code # : D0241603 v2.0 SDS # : D0241603 v2.0 Date of issue : 20/10/2014. 8/10

15. Regulatory information

Name	%	Fire hazard	Sudden release of pressure		Immediate (acute) health hazard	Delayed (chronic) health hazard
glycerol	1 - 2.5	No.	No.	No.	Yes.	No.
guaifenesin		No.	No.	No.	Yes.	No.
Citric acid		No.	No.	No.	Yes.	No.

State regulations

Massachusetts : The following components are listed: GLYCERINE MIST

New York : None of the components are listed.

New Jersey : The following components are listed: GLYCERIN; 1,2,3-PROPANETRIOL;

PROPYLENE GLYCOL; 1,2-PROPANEDIOL

Pennsylvania: The following components are listed: 1,2,3-PROPANETRIOL; 1,2-PROPANEDIOL

Label elements

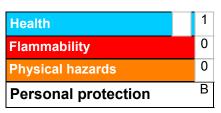
Precautionary measures: Read label before use.

Avoid contact with eyes.

Keep out of reach of children.

16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Code # : D0241603 v2.0 SDS # : D0241603 v2.0 Date of issue : 20/10/2014. 9/10

16. Other information



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Date of issue : 20/10/2014.

Date of previous issue : 09/07/2010

Version : 3

Prepared by : Reckitt Benckiser LLC.

Product Safety Department

1 Philips Parkway

Montvale, New Jersey 07646-1810 USA.

FAX: 201-476-7770

Revision comments : Revision as per US GHS

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

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.



RB is a member of the CSPA Product Care Product Stewardship Program.

Code # : D0241603 v2.0 SDS # : D0241603 v2.0 Date of issue : 20/10/2014. 10/10