

**MUCINEX® FAST-MAX™ Maximum
Strength Day & Night Packets**

MSDS

Enclosed:

MSDS for MUCINEX® FAST-MAX™ Severe Cold Packets

&

MSDS for MUCINEX® FAST-MAX™ Night Time Cold & Flu Packets

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product name

MUCINEX® FAST-MAX™ Maximum Strength Severe Cold Packets

CAS #

Mixture

This MSDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure, in accordance with requirements of the U.S. Government's Occupational Safety and Health Administration (OSHA).

This MSDS 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 regulation.

Product Use

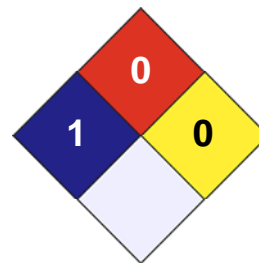
Pain Reliever/Fever Reducer, Cough Suppressant, Expectorant, Nasal Decongestant

Distributed by

Reckitt Benckiser
 Morris Corporate Center IV
 399 Interpace Parkway
 Parsippany, NJ 07054-0225
 In Case of Emergency: 1-800-338-6167
 Transportation Emergencies: 24 Hour Number:
 North America: CHEMTREC: 1-800-424-9300
 Outside North America: 1-703-527-3887

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	/ 1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	



2. Hazards Identification

Emergency overview

This product is regulated by the US FDA as an over-the-counter, monograph drug.

WARNINGS: Liver warning: This product contains acetaminophen. Severe liver damage may occur if you take:

- *more than 6 packets in 24 hours, which is the maximum daily amount.
- *with other drugs containing acetaminophen.
- *3 or more alcoholic drinks daily while using this product.

Sore throat warning: If sore throat is severe, persists for more than 2 days, is accompanied or followed by fever, headache, rash, swelling, nausea, or vomiting, consult a doctor promptly.

Do not use with any other drug containing acetaminophen (prescription or nonprescription). If you are not sure whether a drug contains acetaminophen, ask a doctor or pharmacist.

Do not use if you are now taking a prescription monoamine oxidase inhibitor (MAOI) (certain drugs for depression, psychiatric or emotional conditions, or Parkinson's disease), or for 2 weeks after stopping the MAOI drug. If you do not know if your prescription drug contains an MAOI, ask a doctor or pharmacist before taking the product.

Ask a doctor before use if you have:

- *Liver disease, heart disease, high blood pressure, thyroid disease, diabetes, trouble urinating due to an enlarged prostate gland, persistent or chronic cough such as occurs with smoking, asthma, chronic bronchitis or emphysema, cough that occurs with too much phlegm (mucus) ; a sodium-reduced diet.

Ask a doctor or pharmacist before use if you are taking the blood thinning drug warfarin.

When using this product do not use more than directed.

Stop use and ask a doctor if: *Nervousness, dizziness or sleeplessness occur. *Pain, nasal congestion or cough gets worse or lasts more than 7 days. *Fever gets worse or lasts more than 3 days. *Redness or swelling is present. *New symptoms occur. *Cough comes back, or occurs with fever, rash or headache that lasts. These could be signs of a serious condition.

If pregnant or breast feeding, ask a health professional before use.

Do not use for children under 12 years of age.

KEEP OUT OF REACH OF CHILDREN.

Overdose warning: Taking more than the recommended dose (overdose) may cause liver damage. In case of overdose, get medical help or contact a Poison Control Center right away. Quick medical attention is critical for adults as well as for children even if you do not notice any signs of symptoms.

Potential short term health effects

Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.
Eyes	No risks anticipated in normal use.
Skin	No risks anticipated in normal use.
Inhalation	No risks anticipated in normal use.
Ingestion	No risks anticipated in normal use. Avoid occupational ingestion.
Target organs	Eyes. Respiratory system. Skin.
Chronic effects	The finished product is not expected to have chronic health effects.
Signs and symptoms	May cause irritation.
OSHA regulatory status	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
Potential environmental effects	See section 12.

3. Composition/Information on Ingredients

Components	CAS #	Percent
alpha-D-Glucopyranoside, beta-D-fructofuranosyl	57-50-1	40 - 60
Acetaminophen	103-90-2	10 - 30
Citric Acid	77-92-9	10 - 20
Sodium citrate	6132-04-3	10 - 20
Guaifenesin	93-14-1	2.5 - 10
Dextromethorphan hydrobromide	6700-34-1	0.1 - 1
Phenylephrine hydrochloride	61-76-7	0.1 - 1

4. First Aid Measures

First aid procedures

Eye contact	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove any contact lenses and continue to rinse with water.
Skin contact	In the event of occupational skin contact, wash contaminated area thoroughly.
Inhalation	Move person to non-contaminated air. Call a physician if symptoms develop or persist.
Ingestion	In the event of occupational ingestion, seek medical advice. Induction of vomiting is not a recommended first-aid procedure. Rinse mouth out with water.

Notes to physician

Treat patient symptomatically.

General advice

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Flammable properties Not flammable by OSHA criteria.

Extinguishing media

Suitable extinguishing media	Treat for surrounding material.
Unsuitable extinguishing media	Not available

Protection of firefighters

Specific hazards arising from the chemical	Not available
Protective equipment and precautions for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.

Hazardous combustion products May include and are not limited to: Oxides of carbon. Oxides of nitrogen.

Explosion data

Sensitivity to mechanical impact	Not available.
Sensitivity to static discharge	Not available.

6. Accidental Release Measures

Personal precautions Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.

Environmental precautions Do not discharge into lakes, streams, ponds or public waters. Advise authorities if product has penetrated drains, sewers or water pipes.

Methods for containment Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Rinse area with water. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.

7. Handling and Storage

Handling Use good industrial hygiene practices in handling this material. Avoid contact with skin and clothing. Avoid contact with eyes. Use only with adequate ventilation. Wash thoroughly after handling.

Storage Store between 20°C and 25°C (68°F-77°F). Do not refrigerate. Keep out of reach of children.

8. Exposure Controls/Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1)	TWA	10 mg/m ³

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.

Exposure limits There are no established ACGIH or OSHA PEL exposure limits for the hazardous chemicals listed in section 3 of the MSDS.

Engineering controls General ventilation normally adequate.

Personal protective equipment

Consult the product label for special protection or precautions that have been identified for using this product under directed consumer use conditions. The following recommendations are given for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure.

Eye / face protection No special requirements under normal use conditions. Emergency responders should wear full eye and face protection.

Hand protection No special requirements under normal use conditions. Emergency responders should wear impermeable gloves.

Skin and body protection As required by employer code.

Respiratory protection No special requirements under normal use conditions. Emergency responders should wear self-contained breathing apparatus (SCBA) to avoid inhalation of vapours generated by this product during a spill or other clean-up operations.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. Avoid contact with eyes.

9. Physical and Chemical Properties

Appearance	Powder
Color	Pale yellow
Form	Powder
Odor	Honey / Lemon
Odor threshold	Not available.
Physical state	Solid.
pH	Not available.
Freezing point	Not available.
Boiling point	Not available.
Pour point	Not available.
Evaporation rate	Not available
Flash point	Not available.
Auto-ignition temperature	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	Not available.

Partition coefficient (n-octanol/water)	Not available.
Solubility (water)	Soluble
Relative density	Not available.
Viscosity	Not available.
VOC	Not available
Percent volatile	Not available

10. Stability and Reactivity

Reactivity	This product may react with strong oxidizing agents.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Extreme heat and freezing temperatures. Do not mix with incompatible materials.
Incompatible materials	Caustics.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen.

11. Toxicological Information

Toxicological data

Components	Species	Test Results
Acetaminophen (CAS 103-90-2)		
Acute		
<i>Oral</i>		
LD50	Mouse	338 mg/kg
	Rat	2404 mg/kg
LC50		
Not available.		
alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1)		
Acute		
<i>Oral</i>		
LD50	Rat	29700 mg/kg
LC50		
Not available.		
Citric Acid (CAS 77-92-9)		
Acute		
<i>Oral</i>		
LD50	Mouse	5040 mg/kg
	Rat	3000 mg/kg
LC50		
Not available.		
Dextromethorphan hydrobromide (CAS 6700-34-1)		
Acute		
<i>Oral</i>		
LC50	Guinea pig	336 mg/kg
LD50	Mouse	165 mg/kg
	Rat	350 mg/kg
LC50		
Not available.		

Components	Species	Test Results
Guaifenesin (CAS 93-14-1)		
Acute		
<i>Oral</i>		
LD50	Mouse	690 mg/kg
	Rabbit	2553 mg/kg
	Rat	1510 mg/kg
LC50		
Not available.		
Phenylephrine hydrochloride (CAS 61-76-7)		
Acute		
<i>Oral</i>		
LD50	Mouse	120 mg/kg
	Rat	350 mg/kg
LC50		
Not available.		
Sodium citrate (CAS 6132-04-3)		
Acute		
<i>Oral</i>		
LD50		> 8000 mg/kg
LC50		
Not available.		

Effects of acute exposure

Eye contact	No risks anticipated in normal use.
Skin contact	No risks anticipated in normal use.
Inhalation	No risks anticipated in normal use.
Ingestion	No risks anticipated in normal use. Avoid occupational ingestion.
Sensitization	The finished product is not expected to have chronic health effects.
Chronic effects	The finished product is not expected to have chronic health effects.
Carcinogenicity	The finished product is not expected to have chronic health effects.
Mutagenicity	The finished product is not expected to have chronic health effects.
Reproductive effects	The finished product is not expected to have chronic health effects.
Teratogenicity	The finished product is not expected to have chronic health effects.
Name of Toxicologically Synergistic Products	Not available.

12. Ecological Information

Ecotoxicity	See below		
Ecotoxicological data			
Components			
Acetaminophen (CAS 103-90-2)			
Crustacea	EC50	Daphnia	10.05 mg/L, 48 Hours
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	6.1 - 14 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	814 mg/l, 96 hours
Citric Acid (CAS 77-92-9)			
<i>Acute</i>			
Crustacea	EC50	Daphnia magna	120 mg/l, 72 hr

Components	Species	Test Results
Aquatic <i>Acute</i> Fish	LC50 Bluegill (<i>Lepomis macrochirus</i>)	1516 mg/l, 96 hr
Sodium citrate (CAS 6132-04-3)		
Aquatic Crustacea	EC50 Water flea (<i>Ceriodaphnia dubia</i>)	655 - 825.9 mg/l, 48 hours
Persistence and degradability	Not available.	
Bioaccumulation / Accumulation	Not available	
Mobility in environmental media	Not available.	
Environmental effects	Not available.	
Aquatic toxicity	Not available.	
Partition coefficient	alpha-D-Glucopyranoside, beta-D-fructofuranosyl -3.7	
Chemical fate information	Not available.	

13. Disposal Considerations

Disposal instructions	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Not available
Contaminated packaging	Not available

14. Transport Information

U.S. Department of Transportation (DOT)	Not regulated as dangerous goods.
Transportation of Dangerous Goods (TDG - Canada)	Not regulated as dangerous goods.
IATA/CAO (Air)	Not regulated as dangerous goods.
IMDG (Marine Transport)	Not regulated as dangerous goods.

15. Regulatory Information

Occupational Safety and Health Administration (OSHA)	
29 CFR 1910.1200 hazardous chemical	Yes
US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components of this product are either on the Toxic Substances Control Act list (TSCA) or exempt.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	
Not regulated.	
CERCLA Hazardous Substance List (40 CFR 302.4)	
Not listed.	
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)	
Not regulated.	
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List	
Not regulated.	
CERCLA (Superfund) reportable quantity	
None	

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

State regulations This product is not subject to warning labeling under the California Proposition 65 regulation.

US - Minnesota Haz Subs: Listed substance

alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1) Listed.

US - Texas Effects Screening Levels: Listed substance

alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1) Listed.

Citric Acid (CAS 77-92-9) Listed.

Guaifenesin (CAS 93-14-1) Listed.

Sodium citrate (CAS 6132-04-3) Listed.

US. Massachusetts RTK - Substance List

alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1) Listed.

US. Pennsylvania RTK - Hazardous Substances

alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1) Listed.

US. Rhode Island RTK

Not regulated.

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Disclaimer

This product should only be used as directed on the label and for the purpose intended. 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.

Further information

MUCINEX® FAST-MAX™ Maximum Strength Severe Cold Packets - 3000267v1.0

Issue date

17-March-2014

Effective date

15-March-2014

Prepared by

Reckitt Benckiser Regulatory Department Phone: 800-333-3899

Other information

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.

This MSDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product name MUCINEX® FAST-MAX™ Maximum Strength Night Time Cold & Flu Packets

CAS # Mixture

This MSDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure, in accordance with requirements of the U.S. Government's Occupational Safety and Health Administration (OSHA).

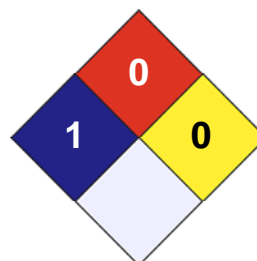
This MSDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulation.

Product Use Pain Reliever/Fever Reducer, Cough Suppressant, Nasal Decongestant

Distributed by Reckitt Benckiser
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 Outside North America: 1-703-527-3887

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	/ 1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	



2. Hazards Identification

Emergency overview

This product is regulated by the US FDA as an over-the-counter, monograph drug.

WARNINGS: Liver warning: This product contains acetaminophen. Severe liver damage may occur if you take:

- *more than 6 packets in 24 hours, which is the maximum daily amount.
- *with other drugs containing acetaminophen.
- *3 or more alcoholic drinks daily while using this product.

Sore throat warning: If sore throat is severe, persists for more than 2 days, is accompanied or followed by fever, headache, rash, swelling, nausea, or vomiting, consult a doctor promptly.

Do not use with any other drug containing acetaminophen (prescription or nonprescription). If you are not sure whether a drug contains acetaminophen, ask a doctor or pharmacist.

Do not use if you are now taking a prescription monoamine oxidase inhibitor (MAOI) (certain drugs for depression, psychiatric or emotional conditions, or Parkinson's disease), or for 2 weeks after stopping the MAOI drug. If you do not know if your prescription drug contains an MAOI, ask a doctor or pharmacist before taking the product.

Ask a doctor before use if you have:

- *Liver disease, heart disease, high blood pressure, thyroid disease, diabetes, trouble urinating due to an enlarged prostate gland, persistent or chronic cough such as occurs with smoking, asthma, chronic bronchitis or emphysema, cough that occurs with too much phlegm (mucus) ; a sodium-reduced diet.

Ask a doctor or pharmacist before use if you are taking the blood thinning drug warfarin. Ask a doctor or pharmacist before use if you are taking sedatives or tranquilizers

When using this product do not use more than directed.

Excitability may occur, especially in children. Marked drowsiness may occur. Alcohol, sedatives and tranquilizers may increase drowsiness. Avoid alcoholic drinks. Be careful when driving a motor vehicle or operating machinery.

Stop use and ask a doctor if: *Nervousness, dizziness or sleeplessness occur. *Pain, nasal congestion or cough gets worse or lasts more than 7 days. *Fever gets worse or lasts more than 3 days. *Redness or swelling is present. *New symptoms occur. *Cough comes back, or occurs with fever, rash or headache that lasts. These could be signs of a serious condition.

If pregnant or breast feeding, ask a health professional before use.

Do not use for children under 12 years of age.

KEEP OUT OF REACH OF CHILDREN.

Overdose warning: Taking more than the recommended dose (overdose) may cause liver damage. In case of overdose, get medical help or contact a Poison Control Center right away. Quick medical attention is critical for adults as well as for children even if you do not notice any signs of symptoms.

Potential short term health effects

Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.
Eyes	No risks anticipated in normal use.
Skin	No risks anticipated in normal use.
Inhalation	No risks anticipated in normal use.
Ingestion	No risks anticipated in normal use. Avoid occupational ingestion.
Target organs	Eyes. Respiratory system. Skin.
Chronic effects	The finished product is not expected to have chronic health effects.
Signs and symptoms	May cause irritation.
OSHA regulatory status	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
Potential environmental effects	See section 12.

3. Composition/Information on Ingredients

Components	CAS #	Percent
alpha-D-Glucopyranoside, beta-D-fructofuranosyl	57-50-1	40 - 60
Acetaminophen	103-90-2	10 - 30
Citric Acid	77-92-9	10 - 20
Sodium citrate	6132-04-3	10 - 20
Diphenhydramine hydrochloride	147-24-0	0.1 - 1
Phenylephrine hydrochloride	61-76-7	0.1 - 1

4. First Aid Measures

First aid procedures

Eye contact	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove any contact lenses and continue to rinse with water.
Skin contact	In the event of occupational skin contact, wash contaminated area thoroughly.
Inhalation	Move person to non-contaminated air. Call a physician if symptoms develop or persist.
Ingestion	In the event of occupational ingestion, seek medical advice. Induction of vomiting is not a recommended first-aid procedure. Rinse mouth out with water.

Notes to physician

Treat patient symptomatically.

General advice

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Flammable properties	Not flammable by OSHA criteria.
Extinguishing media	
Suitable extinguishing media	Treat for surrounding material.
Unsuitable extinguishing media	Not available
Protection of firefighters	
Specific hazards arising from the chemical	Not available
Protective equipment and precautions for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen.
Explosion data	
Sensitivity to mechanical impact	Not available.
Sensitivity to static discharge	Not available.

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
Environmental precautions	Do not discharge into lakes, streams, ponds or public waters. Advise authorities if product has penetrated drains, sewers or water pipes.
Methods for containment	Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Rinse area with water. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.

7. Handling and Storage

Handling	Use good industrial hygiene practices in handling this material. Avoid contact with skin and clothing. Avoid contact with eyes. Use only with adequate ventilation. Wash thoroughly after handling.
Storage	Store between 20°C and 25°C (68°F-77°F). Do not refrigerate. Keep out of reach of children.

8. Exposure Controls/Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1)	TWA	10 mg/m3

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

Exposure limits There are no established ACGIH or OSHA PEL exposure limits for the hazardous chemicals listed in section 3 of the MSDS.

Engineering controls General ventilation normally adequate.

Personal protective equipment

Consult the product label for special protection or precautions that have been identified for using this product under directed consumer use conditions. The following recommendations are given for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure.

Eye / face protection No special requirements under normal use conditions. Emergency responders should wear full eye and face protection.

Hand protection No special requirements under normal use conditions. Emergency responders should wear impermeable gloves.

Skin and body protection As required by employer code.

Respiratory protection No special requirements under normal use conditions. Emergency responders should wear self-contained breathing apparatus (SCBA) to avoid inhalation of vapours generated by this product during a spill or other clean-up operations.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. Avoid contact with eyes.

9. Physical and Chemical Properties

Appearance	Powder
Color	Pale yellow
Form	Powder
Odor	Honey / Lemon
Odor threshold	Not available.
Physical state	Solid.
pH	Not available.
Freezing point	Not available.
Boiling point	Not available.
Pour point	Not available.
Evaporation rate	Not available
Flash point	Not available.
Auto-ignition temperature	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	Not available.

Partition coefficient (n-octanol/water)	Not available.
Solubility (water)	Soluble
Relative density	Not available.
Viscosity	Not available.
VOC	Not available
Percent volatile	Not available

10. Stability and Reactivity

Reactivity	This product may react with strong oxidizing agents.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Extreme heat and freezing temperatures. Do not mix with incompatible materials.
Incompatible materials	Caustics.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen.

11. Toxicological Information

Toxicological data

Components	Species	Test Results
Acetaminophen (CAS 103-90-2)		
Acute		
<i>Oral</i>		
LD50	Mouse	338 mg/kg
	Rat	2404 mg/kg
LC50		
Not available.		
alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1)		
Acute		
<i>Oral</i>		
LD50	Rat	29700 mg/kg
LC50		
Not available.		
Citric Acid (CAS 77-92-9)		
Acute		
<i>Oral</i>		
LD50	Mouse	5040 mg/kg
	Rat	3000 mg/kg
LC50		
Not available.		
Diphenhydramine hydrochloride (CAS 147-24-0)		
Acute		
<i>Oral</i>		
LD50	Mouse	164 mg/kg
	Rat	500 mg/kg
LC50		
Not available.		

Components	Species	Test Results
Phenylephrine hydrochloride (CAS 61-76-7)		
Acute		
<i>Oral</i>		
LD50	Mouse	120 mg/kg
	Rat	350 mg/kg
LC50		
Not available.		
Sodium citrate (CAS 6132-04-3)		
Acute		
<i>Oral</i>		
LD50		> 8000 mg/kg
LC50		
Not available.		

Effects of acute exposure

Eye contact	No risks anticipated in normal use.
Skin contact	No risks anticipated in normal use.
Inhalation	No risks anticipated in normal use.
Ingestion	No risks anticipated in normal use. Avoid occupational ingestion.
Sensitization	The finished product is not expected to have chronic health effects.
Chronic effects	The finished product is not expected to have chronic health effects.
Carcinogenicity	The finished product is not expected to have chronic health effects.
Mutagenicity	The finished product is not expected to have chronic health effects.
Reproductive effects	The finished product is not expected to have chronic health effects.
Teratogenicity	The finished product is not expected to have chronic health effects.
Name of Toxicologically Synergistic Products	Not available.

12. Ecological Information

Ecotoxicity	See below		
Ecotoxicological data			
Components			
Acetaminophen (CAS 103-90-2)			
Crustacea	EC50	Daphnia	10.05 mg/L, 48 Hours
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	6.1 - 14 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	814 mg/l, 96 hours
Citric Acid (CAS 77-92-9)			
<i>Acute</i>			
Crustacea	EC50	Daphnia magna	120 mg/l, 72 hr
Aquatic			
<i>Acute</i>			
Fish	LC50	Bluegill (Lepomis macrochirus)	1516 mg/l, 96 hr
Sodium citrate (CAS 6132-04-3)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	655 - 825.9 mg/l, 48 hours
Persistence and degradability	Not available.		
Bioaccumulation / Accumulation	Not available		

Mobility in environmental media	Not available.
Environmental effects	Not available.
Aquatic toxicity	Not available.
Partition coefficient	
alpha-D-Glucopyranoside, beta-D-fructofuranosyl	-3.7
Chemical fate information	Not available.

13. Disposal Considerations

Disposal instructions	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Not available
Contaminated packaging	Not available

14. Transport Information

U.S. Department of Transportation (DOT)	Not regulated as dangerous goods.
Transportation of Dangerous Goods (TDG - Canada)	Not regulated as dangerous goods.
IATA/ICAO (Air)	Not regulated as dangerous goods.
IMDG (Marine Transport)	Not regulated as dangerous goods.

15. Regulatory Information

Occupational Safety and Health Administration (OSHA)	
29 CFR 1910.1200 hazardous chemical	Yes
US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
	All components of this product are either on the Toxic Substances Control Act list (TSCA) or exempt.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	
	Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4)	
	Not listed.
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)	
	Not regulated.
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List	
	Not regulated.
CERCLA (Superfund) reportable quantity	
	None
Superfund Amendments and Reauthorization Act of 1986 (SARA)	
Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
State regulations	This product is not subject to warning labeling under the California Proposition 65 regulation.
US - Minnesota Haz Subs: Listed substance	
alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1)	Listed.

US - Texas Effects Screening Levels: Listed substance

alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1)	Listed.
Citric Acid (CAS 77-92-9)	Listed.
Diphenhydramine hydrochloride (CAS 147-24-0)	Listed.
Sodium citrate (CAS 6132-04-3)	Listed.

US. Massachusetts RTK - Substance List

alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1)	Listed.
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US. Pennsylvania RTK - Hazardous Substances

alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1)	Listed.
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US. Rhode Island RTK

Not regulated.

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Disclaimer

This product should only be used as directed on the label and for the purpose intended. 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.

Further information

MUCINEX® FAST-MAX™ Maximum Strength Night Time Cold & Flu Packets - 3002615v1.0

Issue date

17-March-2014

Effective date

15-March-2014

Prepared by

Reckitt Benckiser Regulatory Department Phone: 800-333-3899

Other information

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.

This MSDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.