Material Safety Data Sheet

Material Name: Delsym ® Orange Flavored Suspension

*** Section 1 - Chemical Product and Company Identification ***

Product Use: Orange flavored cough suppressant for both adults and children.

Manufactured For:
Reckitt Benckiser Inc
399 Interpace Parkway (P.O. Box 225)
Parsippany, New Jersey 07054-0225

Emergency telephone number: 1-800-228-4722 (U.S.)

*** Section 2 - Hazards Identification ***

Emergency Overview
No hazards anticipated under normal product use conditions.

Potential Health Effects: Eyes
None anticipated under normal product use conditions.

Potential Health Effects: Skin
None anticipated under normal product use conditions.

Potential Health Effects: Ingestion
None anticipated under normal product use conditions. Avoid occupational ingestion.

Potential Health Effects: Inhalation
None anticipated under normal product use conditions.

HMIS Ratings: Health: 1 Fire: 0 HMIS Reactivity 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe  * = Chronic hazard

*** Section 3 - Composition / Information on Ingredients ***

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>7732-18-5</td>
<td>Water</td>
</tr>
<tr>
<td>57-55-6</td>
<td>1,2-Propylene glycol</td>
</tr>
<tr>
<td>Not Available</td>
<td>High Fructose Corn Syrup</td>
</tr>
<tr>
<td>6700-34-1</td>
<td>Dextromethorphan Hydrobromide (3-Methoxy-17-methyl-9α,13α,14α-morphinane hydrobromide monohydrate)</td>
</tr>
<tr>
<td>141-78-6</td>
<td>Ethylacetate</td>
</tr>
<tr>
<td>3783-94-0</td>
<td>FD&amp;C Yellow # 6 Dye</td>
</tr>
<tr>
<td>77-92-9</td>
<td>Citric acid</td>
</tr>
<tr>
<td>6381-92-6</td>
<td>Edetate disodium (Ethylenediaminetetraacetic acid, disodium, dihyrate)</td>
</tr>
<tr>
<td>9005-65-6</td>
<td>Polyoxyethylene 20 sorbitan monooleate</td>
</tr>
<tr>
<td>9000-65-1</td>
<td>Tragacanth</td>
</tr>
<tr>
<td>11138-66-2</td>
<td>Xanthan gum</td>
</tr>
<tr>
<td>94-13-3</td>
<td>Propylparaben (Propyl-p-hydroxybenzoate)</td>
</tr>
<tr>
<td>99-76-3</td>
<td>Methylparaben (Methyl p-hydroxybenzoate)</td>
</tr>
<tr>
<td>57-50-1</td>
<td>Sucrose</td>
</tr>
</tbody>
</table>

*** Section 4 - First Aid Measures ***

First Aid: Eyes
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

First Aid: Skin
In the event of occupational skin contact, wash contaminated area thoroughly.
Material Safety Data Sheet

Material Name: Delsym® Orange Flavored Suspension

First Aid: Ingestion
In the event of occupational ingestion, seek medical advice. Induction of vomiting is not a recommended first-aid procedure.

First Aid: Inhalation
Move person to non-contaminated air. Call a physician if symptoms develop or persist.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards
See Section 9 for Flammability Properties.
None anticipated

Hazardous Combustion Products
Not determined

Extinguishing Media
Use extinguishing media suitable for surrounding fire.

Fire Fighting Equipment/Instructions
Firefighters should wear full protective gear.

NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Containment Procedures
Containment of this material should not be necessary.

Clean-Up Procedures
Clean up residual material by washing area with water.

Evacuation Procedures
Isolate area. Keep unnecessary personnel away.

Special Procedures
None necessary.

*** Section 7 - Handling and Storage ***

Handling Procedures
Avoid contact with skin and eyes.

Storage Procedures
No storage requirements necessary for occupational hazards. Follow storage recommendations for the product.

*** Section 8 - Exposure Controls / Personal Protection ***

Exposure Guidelines
A: General Product Information
General mechanical ventilation is adequate for normal use. Local exhaust is recommended for confined areas.

B: Component Exposure Limits
Sucrose (57-50-1)

ACGIH: 10 mg/m3 TWA
OSHA: 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
NIOSH: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)
Material Safety Data Sheet

Material Name: Delsym® Orange Flavored Suspension

Ethylacetate (141-78-6)

ACGIH: 400 ppm TWA
OSHA: 400 ppm TWA; 1400 mg/m3 TWA
NIOSH: 400 ppm TWA; 1400 mg/m3 TWA

Engineering Controls

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face
None required under anticipated product use conditions.

Personal Protective Equipment: Skin
None required under anticipated product use conditions.

Personal Protective Equipment: Respiratory
None required under anticipated product use conditions.

Personal Protective Equipment: General
Eye wash fountain and emergency showers are recommended.

** Section 9 - Physical & Chemical Properties **

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Orange</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>ND</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>ND</td>
</tr>
<tr>
<td>Solubility (H2O)</td>
<td>ND</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>ND</td>
</tr>
<tr>
<td>Octanol/H2O Coeff.</td>
<td>ND</td>
</tr>
<tr>
<td>Flash Point Method</td>
<td>ND</td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>ND</td>
</tr>
<tr>
<td>(LFL):</td>
<td></td>
</tr>
<tr>
<td>Auto Ignition</td>
<td>ND</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>pH</td>
<td>ND</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>ND</td>
</tr>
<tr>
<td>Melting Point</td>
<td>ND</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>ND</td>
</tr>
<tr>
<td>VOC</td>
<td>ND</td>
</tr>
<tr>
<td>Flash Point</td>
<td>ND</td>
</tr>
<tr>
<td>Upper Flammability Limit</td>
<td>ND</td>
</tr>
<tr>
<td>(UFL):</td>
<td></td>
</tr>
<tr>
<td>Burning Rate</td>
<td>ND</td>
</tr>
</tbody>
</table>

** Section 10 - Chemical Stability & Reactivity Information **

Chemical Stability
This is a stable material.

Chemical Stability: Conditions to Avoid
None for normal handling of this product.

Incompatibility
None

Hazardous Decomposition
Not Determined

Possibility of Hazardous Reactions
Will not occur.

** Section 11 - Toxicological Information **

Acute Dose Effects
A: General Product Information
No information available for the product.

B: Component Analysis - LD50/LC50
Water (7732-18-5)
Material Safety Data Sheet

Material Name: Delsym® Orange Flavored Suspension

Oral LD50 Rat: >90 mL/kg

Dextromethorphan Hydrobromide (3-Methoxy-17-methyl-9α,13α,14α-morphinane hydro bromide monohydrate)
Oral LD50 Mouse: 165 mg/kg; Oral LD50 Rat: 350 mg/kg; Oral LD50 Guinea Pig: 336 mg/kg

1,2-Propylene glycol (57-55-6)
Oral LD50 Rat: 20000 mg/kg; Dermal LD50 Rabbit: 20800 mg/kg

Sucrose (57-50-1)
Oral LD50 Rat: 29700 mg/kg

Ethylacetate (141-78-6)
Oral LD50 Rat: 5620 mg/kg; Dermal LD50 Rabbit: >20 mL/kg; Dermal LD50 Rabbit: >18000 mg/kg

Citric acid (77-92-9)
Oral LD50 Rat: 3000 mg/kg

Gum tragacanth (9000-65-1)
Oral LD50 Rat: 10200 mg/kg

Polyoxyethylene 20 sorbitan monooleate (9005-65-6)
Oral LD50 Rat: 34500 µL/kg

Propylparaben - Propyl-p-hydroxybenzoate (94-13-3)
Oral LD50 Mouse: 6332 mg/kg

Methylparaben - Methyl p-hydroxybenzoate (99-76-3)
Oral LD50 Rat: 2100 mg/kg

Carcinogenicity

A: General Product Information
No information available for the product.

B: Component Carcinogenicity

Sucrose (57-50-1)
ACGIH: A4 - Not Classifiable as a Human Carcinogen

C.I. Acid blue 9, disodium salt (3844-45-9)
IARC: Supplement 7 [1987], Monograph 16 [1978] (Group 3 (not classifiable))

*** Section 12 - Ecological Information ***

Ecotoxicity

A: General Product Information
No data available for this product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

1,2-Propylene glycol (57-55-6)

<table>
<thead>
<tr>
<th>Test &amp; Species</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>96 Hr LC50 Oncorhynchus mykiss</td>
<td>51600 mg/L [static]</td>
</tr>
<tr>
<td>96 Hr LC50 Pimephales promelas</td>
<td>51400 mg/L [static]</td>
</tr>
<tr>
<td>96 Hr EC50 Selenastrum capricornutum</td>
<td>19000 mg/L</td>
</tr>
</tbody>
</table>
Material Safety Data Sheet

Material Name: Delsym® Orange Flavored Suspension

30 min EC50 Photobacterium phosophoreum 710 mg/L
48 Hr EC50 water flea >10000 mg/L

Ethylacetate (141-78-6)

Test & Species Conditions
96 Hr LC50 Pimephales promelas 230 mg/L [flow-through]
96 Hr LC50 Oncorhynchus mykiss 484 mg/L [flow-through]
48 Hr EC50 Scenedesmus subspicatus 3300 mg/L
5 min EC50 Photobacterium phosophoreum 1180 mg/L
15 min EC50 Photobacterium phosophoreum 5870 mg/L
2 Hr EC50 Pseudomonas fluorescens 7400 mg/L
15 min EC50 Pseudomonas fluorescens 1500 mg/L
48 Hr EC50 Daphnia magna 717 mg/L

Citric acid (77-92-9)

Test & Species Conditions
96 Hr LC50 Lepomis macrochirus 1516 mg/L [static]
96 Hr LC50 Leuciscus idus 440 mg/L [static]
15 min EC50 Photobacterium phoshoreum 14 mg/L
72 Hr EC50 Daphnia magna 120 mg/L

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

Component Waste Numbers
Ethylacetate (141-78-6)
RCRA: waste number U112 (Ignitable waste)

Disposal Instructions
All wastes must be handled in accordance with local, state and federal regulations.
See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

*** Section 14 - Transportation Information ***

US DOT Information
Shipping Name: Not Regulated

*** Section 15 - Regulatory Information ***

US Federal Regulations

Component Analysis
This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).
Ethylacetate (141-78-6)
CERCLA: 5000 lb final RQ; 2270 kg final RQ
Material Safety Data Sheet

Material Name: Delsym® Orange Flavored Suspension

State Regulations

Component Analysis - State
The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2-Propylene glycol</td>
<td>57-55-6</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sucrose</td>
<td>57-50-1</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Ethylacetate</td>
<td>141-78-6</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Gum tragacanth</td>
<td>9000-65-1</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>C.I. Acid blue 9, disodium salt</td>
<td>3844-45-9</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Component Analysis - WHMIS IDL
The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Minimum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2-Propylene glycol</td>
<td>57-55-6</td>
<td>1 %</td>
</tr>
<tr>
<td>Ethylacetate</td>
<td>141-78-6</td>
<td>1 %</td>
</tr>
<tr>
<td>Citric acid</td>
<td>77-92-9</td>
<td>1 %</td>
</tr>
</tbody>
</table>

Additional Regulatory Information

Component Analysis - Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>TSCA</th>
<th>CAN</th>
<th>EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Dextromethorphan Hydrobromide (3-Methoxy-17-methyl-9α,13α,14α-morphinane</td>
<td>6700-34-1</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>hydrobromide monohydrate)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2-Propylene glycol</td>
<td>57-55-6</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Sucrose</td>
<td>57-50-1</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Xanthan gum</td>
<td>11138-66-2</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Ethylenediaminetetraacetic acid, disodium, dihydrate</td>
<td>6381-92-6</td>
<td>No</td>
<td>DLS</td>
<td>No</td>
</tr>
<tr>
<td>Ethylacetate</td>
<td>141-78-6</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>C.I. Acid red 33, disodium salt</td>
<td>3567-66-6</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Citric acid</td>
<td>77-92-9</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Gum tragacanth</td>
<td>9000-65-1</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Polyoxylethylene 20 sorbitan monooleate</td>
<td>9005-65-6</td>
<td>Yes</td>
<td>DSL</td>
<td>No</td>
</tr>
<tr>
<td>Propyl-p-hydroxybenzoate</td>
<td>94-13-3</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Methyl p-hydroxybenzoate</td>
<td>99-76-3</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>C.I. Acid blue 9, disodium salt</td>
<td>3844-45-9</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
</tbody>
</table>

*** Section 16 - Other Information ***

Other Information
The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial and local laws.

Key/Legend
EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration, NJTSR = New Jersey Trade Secret Registry.