SAFETY DATA SHEET
Cola®Mulse HP500

1. Identification

Product identifier
Product name Cola®Mulse HP500
Product number 1636

Recommended use of the chemical and restrictions on use
Application Surfactant
Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet
Manufacturer Colonial Chemical, Inc.
225 Colonial Drive
South Pittsburg, TN 37380
U.S.A.
+1 (423) 837-8800

Emergency telephone number
Emergency telephone Toll free (in USA, Canada, Puerto Rico, Virgin Islands only): 1-800-424-9300
Direct dial: +1 703-527-3887

2. Hazard(s) identification

Classification of the substance or mixture
Physical hazards Not Classified
Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 Skin Sens. 1 - H317
Environmental hazards Aquatic Acute 2 - H401 Aquatic Chronic 2 - H411

Label elements
Hazard symbols

Signal word Warning
Hazard statements H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.
Cola®Mulse HP500

Precautionary statements

P261 Avoid breathing vapor/spray.
P264 Wash contaminated skin thoroughly after handling.
P272 Contaminated work clothing must not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 If on skin: Wash with plenty of water.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.
P501 Dispose of contents/container in accordance with national regulations.

Contains

2,2'-iminodiethylamine

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Compound</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,2'-iminodiethylamine</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>CAS number: 111-40-0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compound</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethylene oxide</td>
<td>&lt; 5 ppm</td>
</tr>
<tr>
<td>CAS number: 75-21-8</td>
<td></td>
</tr>
</tbody>
</table>

Classification

2,2'-iminodiethylamine
Acute Tox. 4 - H302
Acute Tox. 4 - H312
Skin Corr. 1B - H314
Eye Dam. 1 - H318
Skin Sens. 1 - H317

ethylene oxide
Flam. Gas 1 - H220
Acute Tox. 3 - H331
Skin Irrit. 2 - H315
Eye Irrit. 2A - H319
Muta. 1B - H340
Carc. 1B - H350
STOT SE 3 - H335

The full text for all hazard statements is displayed in Section 16.

Composition comments

* The identity or exact percentage is withheld as a trade secret.

4. First-aid measures

Description of first aid measures
Cola®Mulse HP500

General information
Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.

Inhalation
Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.

Ingestion
Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Never give anything by mouth to an unconscious person. Place unconscious person on their side in the recovery position and ensure breathing can take place. Keep affected person under observation. Get medical attention if symptoms are severe or persist.

Skin Contact
Rinse with water.

Eye contact
Rinse immediately with plenty of water. Do not rub eye. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

Protection of first aiders
First aid personnel should wear appropriate protective equipment during any rescue.

Most important symptoms and effects, both acute and delayed

General information
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation
No specific symptoms known.

Ingestion
May cause discomfort if swallowed. Stomach pain. Nausea, vomiting.

Skin contact
Redness. Irritating to skin.

Eye contact
Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness.

Indication of immediate medical attention and special treatment needed

Notes for the doctor
Treat symptomatically.

5. Fire-fighting measures

Extinguishing media
Suitable extinguishing media
The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture

Specific hazards
Containers can burst violently or explode when heated, due to excessive pressure build-up. This product is toxic.

Hazardous combustion products
Thermal decomposition or combustion products may include the following substances: Toxic gases or vapors.

Advice for firefighters

Protective actions during firefighting
Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
Cola®Mulse HP500

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions
Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material.

Environmental precautions
Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment.

Methods and material for containment and cleaning up

Methods for cleaning up
Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Provide adequate ventilation. Small Spillages: Collect spillage. Large Spillages: Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. For waste disposal, see Section 13.

Reference to other sections
For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions
Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on general occupational hygiene
Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage precautions
Store away from incompatible materials (see Section 10). Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.

Storage class
Miscellaneous hazardous material storage.

Specific end use(s)

Specific end use(s)
The identified uses for this product are detailed in Section 1.

8. Exposure controls/Personal protection

Control parameters

Occupational exposure limits
2,2'-iminoethane
Cola®Mulse HP500

Long-term exposure limit (8-hour TWA): ACGIH 1 ppm 4.2 mg/m³
Sk

ethylene oxide

Long-term exposure limit (8-hour TWA): ACGIH 1 ppm 1.8 mg/m³
A2

Long-term exposure limit (8-hour TWA): OSHA 1 ppm

Short-term exposure limit (15-minute): OSHA 5 ppm

ACGIH = American Conference of Governmental Industrial Hygienists.
Sk = Danger of cutaneous absorption.
A2 = Suspected Human Carcinogen.
OSHA = Occupational Safety and Health Administration.

ethylene oxide (CAS: 75-21-8)

Immediate danger to life and health 800 ppm

Exposure controls

Protective equipment

Appropriate engineering controls
Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection
Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection
Wear protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection
Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures
Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.

Respiratory protection
Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with OSHA 1910.134. Full face mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134.

Environmental exposure controls
Keep container tightly sealed when not in use. 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.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance Liquid.
**Cola®Mulse HP500**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Amber</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH (as is):</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not available</td>
</tr>
<tr>
<td>Initial boiling point and range</td>
<td>&gt;100°C</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 100°C Pensky-Martens closed cup.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper/lower flammability or</td>
<td>Not applicable</td>
</tr>
<tr>
<td>explosive limits</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.9910 g/mL @ 25°C</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Soluble in water.</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Other information</td>
<td>None</td>
</tr>
<tr>
<td>Pour Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Surface Tension</td>
<td>Not available</td>
</tr>
<tr>
<td>% Solids</td>
<td>Not available</td>
</tr>
</tbody>
</table>

### 10. Stability and reactivity

<table>
<thead>
<tr>
<th></th>
<th>See the other subsections of this section for further details.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.</td>
</tr>
<tr>
<td>Stability</td>
<td>No potentially hazardous reactions known.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>There are no known conditions that are likely to result in a hazardous situation.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>No specific material or group of materials is likely to react with the product to produce a hazardous situation.</td>
</tr>
</tbody>
</table>
Cola®Mulse HP500

### Hazardous decomposition products
Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Toxic gases or vapors.

### 11. Toxicological information

#### Information on toxicological effects

**Acute toxicity - oral**
- **Notes (oral LD₅₀)**
  
  Acute Tox. 4 - H302 Harmful if swallowed.
- **ATE oral (mg/kg)**
  
  1,278.77

**Acute toxicity - dermal**
- **Notes (dermal LD₅₀)**
  
  Based on available data the classification criteria are not met.

**Acute toxicity - inhalation**
- **Notes (inhalation LC₅₀)**
  
  Based on available data the classification criteria are not met.

**Skin corrosion/irritation**

**Skin corrosion/irritation**

Irritating to skin.

**Serious eye damage/irritation**

Eye Dam. 1 - H318 Causes serious eye damage.

**Respiratory sensitization**

Based on available data the classification criteria are not met.

**Skin sensitization**

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.

**IARC carcinogenicity**

Contains a substance/a group of substances which may cause cancer. IARC Group 1 Carcinogenic to humans.

**Reproductive toxicity**

Based on available data the classification criteria are not met.

**Reproductive toxicity - fertility**

Based on available data the classification criteria are not met.

**Reproductive toxicity - development**

Based on available data the classification criteria are not met.

**Specific target organ toxicity - single exposure**

**STOT - single exposure**

Not classified as a specific target organ toxicant after a single exposure.

**Specific target organ toxicity - repeated exposure**

**STOT - repeated exposure**

Not classified as a specific target organ toxicant after repeated exposure.

**Aspiration hazard**

Based on available data the classification criteria are not met.

**General information**

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation**

No specific symptoms known.

**Ingestion**

May cause discomfort if swallowed. Stomach pain. Nausea, vomiting.
Cola®Mulse HP500

Skin Contact
Redness. Irritating to skin.

Eye contact
Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness.

Route of exposure
Ingestion
Inhalation
Skin and/or eye contact

Target Organs
No specific target organs known.

12. Ecological information

Toxicity
Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.

Persistence and degradability
The degradability of the product is not known.

Bioaccumulative potential
No data available on bioaccumulation.

Mobility in soil
No data available.

Other adverse effects
None known.

13. Disposal considerations

Waste treatment methods

General information
The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal methods
Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

14. Transport information

General
For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

Sea transport notes
Class 9: Limited quantity packaging is maximum 5 L. Excepted quantity package is maximum 30 ml (inner) and 1000 ml total.

Air transport notes
Class 9: Limited quantity packaging is maximum 5 L (inner) and 30 kg gross. Excepted quantity package is maximum 30 ml (inner) and 1 kg gross. These limits apply to both passenger and cargo aircraft.
Cola®Mulse HP500

DOT transport notes
Class 9 Special Provision: Use of the Class 9 classification, including markings, is not required for domestic ground transportation in USA if the material does not meet the definition of a hazardous waste or hazardous substance as defined in 49 CFR 171.8, even though it is designated as environmentally hazardous by another Competent Authority. Ref: 49 CFR 172.102(c)(1)(Provision 146).

UN Number
UN No. (TDG) 3082
UN No. (IMDG) 3082
UN No. (ICAO) 3082
UN No. (DOT) Not Hazardous

UN proper shipping name
Proper shipping name (TDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (User to define)
Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (User to define)
Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (User to define)
Proper shipping name (DOT) Not Hazardous

Transport hazard class(es)
TDG class 9
TDG label(s) 9
IMDG Class 9
ICAO class/division 9

Transport labels

Packing group
TDG Packing Group III
IMDG packing group III
ICAO packing group III

Environmental hazards
Environmentally Hazardous Substance

Special precautions for user
Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS F-A, S-F

DOT reportable quantity RQ: Ethylene oxide (2557544.757 lbs)
Cola®Mulse HP500

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code. Not applicable.

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
The following ingredients are listed or exempt:

- ethylene oxide
  - EPCRA 302 TPQ 1000 lbs Tier II TPQ 500 lbs

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
The following ingredients are listed or exempt:

- ethylene oxide
  - Final CERCLA RQ: 10(4.54) pounds (Kilograms)

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
None of the ingredients are listed or exempt.

SARA 313 Emission Reporting
The following ingredients are listed or exempt:

- ethylene oxide
  - 0.1 %

CAA Accidental Release Prevention
The following ingredients are listed or exempt:

- ethylene oxide
  - Threshold Quantity: 10000 lbs

FDA - Essential Chemical
None of the ingredients are listed or exempt.

FDA - Precursor Chemical
None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories
None of the ingredients are listed or exempt.

OSHA Highly Hazardous Chemicals
The following ingredients are listed or exempt:

- ethylene oxide
  - Threshold Quantity: 5000 lbs

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins
The following ingredients are listed or exempt:

- ethylene oxide
  - Carcinogen, developmental toxin and reproductive toxin.

California Air Toxics "Hot Spots" (A-I)
The following ingredients are listed or exempt:

- ethylene oxide
Cola®Mulse HP500

California Air Toxics "Hot Spots" (A-II)
None of the ingredients are listed or exempt.

California Directors List of Hazardous Substances
The following ingredients are listed or exempt:
ethylene oxide

Massachusetts "Right To Know" List
The following ingredients are listed or exempt:
ethylene oxide

Rhode Island "Right To Know" List
The following ingredients are listed or exempt:
ethylene oxide
Oleic acid

Minnesota "Right To Know" List
The following ingredients are listed or exempt:
ethylene oxide

New Jersey "Right To Know" List
The following ingredients are listed or exempt:
ethylene oxide

Pennsylvania "Right To Know" List
The following ingredients are listed or exempt:
ethylene oxide
Oleic acid

Inventories
EU - REACH  Not registered

Canada - DSL/NDSL
All the ingredients are listed or exempt.
DSL

US - TSCA
All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification
None of the ingredients are listed or exempt.

Australia - AICS
All the ingredients are listed or exempt.

Japan - ENCS
Some of the ingredients are listed or exempt.

Korea - KECI
All the ingredients are listed or exempt.

China - IECSC
All the ingredients are listed or exempt.

China - IECIC  Not listed.
Cola®Mulse HP500

Philippines - PICCS
Not listed.

New Zealand - NZIOC
All the ingredients are listed or exempt.

Taiwan - NECI
All the ingredients are listed or exempt.

16. Other information

<table>
<thead>
<tr>
<th>Classification abbreviations</th>
<th>Acute Tox. = Acute toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>and acronyms</td>
<td>Eye Dam. = Serious eye damage</td>
</tr>
<tr>
<td></td>
<td>Skin Irrit. = Skin irritation</td>
</tr>
<tr>
<td></td>
<td>Aquatic Chronic = Hazardous to the aquatic environment (chronic)</td>
</tr>
</tbody>
</table>

Training advice
Only trained personnel should use this material.

Issued by
Regulatory Affairs Department

Revision date
8/5/2019

Revision
5

Supersedes date
8/2/2019

SDS No.
6057

Hazard statements in full
H220 Extremely flammable gas.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H340 May cause genetic defects.
H350 May cause cancer.
H401 Toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

End of SDS

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.