

SAFETY DATA SHEET Cola®Mulse CS450

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification	
Product identifier	
Product name	Cola®Mulse CS450
Product number	3915
Recommended use of the che	mical and restrictions on use
Application	Surfactant
Uses advised against	No specific uses advised against are identified.
Details of the supplier of the sa	afety data sheet
Manufacturer	Colonial Chemical, Inc. 225 Colonial Drive South Pittsburg, TN 37380 (423) 837-8800
Emergency telephone number	
Emergency telephone	(800) 424-9300
2. Hazard(s) identification	
Classification of the substance	e or mixture
Physical hazards	Not Classified
Health hazards	Skin Irrit. 2 - H315 Eye Dam. 1 - H318
Environmental hazards	Aquatic Acute 2 - H401
Label elements	
Pictogram	
Signal word	Danger
Hazard statements	H315 Causes skin irritation. H318 Causes serious eye damage. H401 Toxic to aquatic life.

Precautionary statements	 P264 Wash contaminated skin thoroughly after handling. 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. P310 Immediately call a poison center/ doctor. P321 Specific treatment (see medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P501 Dispose of contents/ container in accordance with national regulations.
Contains	Proprietary, Proprietary, Proprietary

Other hazards

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

3. Composition/information on ingredients

Mixtures

Proprietary	60-100%
CAS number: Proprietary	
Classification Skin Irrit. 2 - H315 Eye Irrit. 2A - H319	
Proprietary CAS number: Proprietary	10-30%
Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318	
Proprietary	5-10%
CAS number: Proprietary	
M factor (Acute) = 1	
Classification Eye Dam. 1 - H318 Aquatic Acute 1 - H400	
Proprietary CAS number: Proprietary	5-10%
Classification	

1,4-dioxane	<0.001%
CAS number: 123-91-1	
Classification	
Flam. Liq. 2 - H225	
Eye Irrit. 2A - H319	
Carc. 2 - H351	
STOT SE 3 - H335	
ethylene oxide	<0.001%
CAS number: 75-21-8	
Classification	
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 sta	atements is displayed in Section 16.
Composition comments	* The identity or exact percentage is withheld as a trade secret in accordance with 29 CFR 1910.1200.
4. First-aid measures	
Description of first aid measure	ures
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. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.
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 ar	nd 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 irritation.
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.

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	ne substance or mixture
Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Harmful 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. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.
6. Accidental release measure	S
Personal precautions, protectiv	ve 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	
Environmental precautions	Avoid discharge to the aquatic environment.
Methods and material for conta	ainment 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. 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. 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.

Indication of immediate medical attention and special treatment needed

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, in	cluding 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	Chemical storage.	
Specific end uses(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		
1,4-dioxane		

Long-term exposure limit (8-hour TWA): ACGIH 20 ppm 72 mg/m³ A3, Sk

Long-term exposure limit (8-hour TWA): OSHA 100 ppm 360 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. A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans. A2 = Suspected Human Carcinogen.

Sk = Danger of cutaneous absorption. OSHA = Occupational Safety and Health Administration.

1,4-dioxane (CAS: 123-91-1)

Immediate danger to life 500 ppm and health

ethylene oxide (CAS: 75-21-8)

Immediate danger to life 800 ppm and health

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 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.
Color	Yellow.
Odor	Characteristic.
Odor threshold	Not available.
Melting point	Not available.
Initial boiling point and range	200°C
Flash point	> 95°C PMCC (Pensky-Martens closed cup).
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	1.03 g/mL @ 25°C
Solubility(ies)	Soluble in water.
Partition coefficient	Not available.

Auto-ignition temperature	Not available.	
Decomposition Temperature	Not available.	
Viscosity	Not available.	
Explosive properties	Not applicable.	
Oxidizing properties	Not applicable.	
Other information	None.	
Pour Point		
Freezing Point		
10. Stability and reactivity		
Reactivity	See the other subsections of this section for further details.	
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.	
Possibility of hazardous reactions	No potentially hazardous reactions known.	
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.	
Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.	
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.	
11. Toxicological information		
Information on toxicological ef	fects	
Acute toxicity - oral		
Notes (oral LD₅₀)	Based on available data the classification criteria are not met.	
ATE oral (mg/kg)	7,031.61	
<u>Acute toxicity - dermal</u> Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.	
Acute toxicity - inhalation Notes (inhalation LC ₅₀)	Based on available data the classification criteria are not met.	
Skin corrosion/irritation Skin corrosion/irritation	Irritating to skin.	
Serious eye damage/irritation Serious eye damage/irritation	Eye Dam. 1 - H318 Causes serious eye damage.	
Respiratory sensitization Respiratory sensitization	Based on available data the classification criteria are not met.	
Skin sensitization Skin sensitization	Based on available data the classification criteria are not met.	

Germ cell mutagenicity	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Carcinogenicity	
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	
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 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 irritation.
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 entry	Ingestion Inhalation Skin and/or eye contact
Target Organs	No specific target organs known.
12. Ecological Information	
Ecotoxicity	Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.
Toxicity	Based on available data the classification criteria are not met.
Persistence and degradability	
Persistence and degradability	The degradability of the product is not known.
Bioaccumulative potential	
Bio-Accumulative Potential	No data available on bioaccumulation.
Partition coefficient	Not available.
Mobility in soil	
Mobility	No data available.
Other adverse effects	

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	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).	
UN Number		
Not applicable.		
UN proper shipping name		
Not applicable.		
Transport hazard class(es) No transport warning sign requ	uired.	
Transport labels No transport warning sign req	uired.	
DOT transport labels No transport warning sign requ	uired.	
Packing group		
Not applicable.		
Environmental hazards		
Environmentally Hazardous Substance		
Special precautions for user		
Not applicable.		
DOT TIH Zone	Not applicable.	
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)

1,4-dioxane Final CERCLA RQ: 100(45.4) 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 %

1,4-dioxane 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

Known to the State of California to cause cancer, developmental, female and male reproductive toxicity.

1,4-dioxane Known to the State of California to cause cancer.

California Air Toxics "Hot Spots" (A-I)

The following ingredients are listed or exempt:

ethylene oxide

1,4-dioxane

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

1,4-dioxane

Massachusetts "Right To Know" List

The following ingredients are listed or exempt:

ethylene oxide

1,4-dioxane

Rhode Island "Right To Know" List

The following ingredients are listed or exempt:

ethylene oxide

1,4-dioxane

Propane-1,2-diol

Minnesota "Right To Know" List

The following ingredients are listed or exempt:

ethylene oxide

1,4-dioxane

Propane-1,2-diol

New Jersey "Right To Know" List

The following ingredients are listed or exempt:

ethylene oxide

1,4-dioxane

Propane-1,2-diol

Pennsylvania "Right To Know" List

The following ingredients are listed or exempt:

ethylene oxide

1,4-dioxane

Propane-1,2-diol

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 - MITI Not listed.

China - IECSC All the ingredients are listed or exempt.

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

Classification abbreviations and acronyms	Eye Dam. = Serious eye damage Skin Irrit. = Skin irritation
Training advice	Only trained personnel should use this material.
Issued by	Regulatory Affairs Department
Revision date	1/12/2018
Revision	1
SDS No.	5539
Hazard statements in full	 H220 Extremely flammable gas. H225 Highly flammable liquid and vapor. H302 Harmful if swallowed. H315 Causes skin irritation. 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. H351 Suspected of causing cancer. H400 Very toxic to aquatic life. H401 Toxic to aquatic life.

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.