

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFICATION

Brand Name: **Merfin® Mates Hand Sanitizer #9200**

Chemical Name: Formulation

Common Name:

Formula Name: Mixture

Molecular weight: N/A

HMIS NFPA

HEALTH	1	1
FLAMMABILITY	1	1
PHYSICAL HAZARDS	0	0
HMIS PPE	B	

PREPARER
Merfin Systems Inc.
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EMERGENCY TELEPHONE NUMBER
Merfin Systems 1-800-874-6373

2. COMPOSITION/INFORMATION ON INGREDIENTS

INCI NAME	CAS#/EINECS#	WEIGHT %
Benzalkonium Chloride	8001-54-5/263-080-8	1.0
Water	7732-18-5/231-791-2	
Dihydroxypropyl PEG-5 Linoleammonium Chloride	168677-75-6/NLP	
Glycereth-2 Cocoate	68201-46-7/NLP	
Behentrimonium Chloride	17301-53-0/241-327-0	
Dihydroxyethyl cocamine Oxide	61791-47-7/263-180-1	

(Note: See Section 8 of this MSDS for Exposure Guidelines)

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Clear colorless to light amber solution with a mild odor.

Repeated/prolonged contact may cause eye and skin irritation. Inhalation may cause mucous membrane irritation. Ingestion may cause gastrointestinal discomfort including irritation, nausea and diarrhea.

This product is not combustible.
Use extinguishing media suitable for the materials that are burning.

POTENTIAL HEALTH EFFECTS

PRIMARY ROUTE(S) OF ENTRY

Eye contact; Skin Contact; Inhalation, Ingestion

SYMPTOMS OF EXPOSURE

Eye contact: Direct contact can cause pain and irritation

Skin contact: Short periods of contact are not usually associated with skin irritation. Repeated direct contact can result in moderate irritation. Prolonged contact can result in moderate skin irritation.

Inhalation: Direct contact or exposure to high concentration of mists or vapors may cause irritation.

Ingestion: Direct contact or exposure may cause irritation. Ingestion of large amounts may cause gastrointestinal discomfort including irritation, nausea and diarrhea.

Chronic effects: No adverse effects are expected.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None known

REPORTED AS CARCINOGEN OR POTENTIAL CARCINOGEN

☒ Not Applicable

☐ OSHA

☐ National Toxicology Program (NTP)

☐ International Agency for Research on Cancer (IARC)

MERFIN® MATE HAND SANITIZER #9200

4. FIRST AID MEASURES

EYE CONTACT

Rinse eyes with water. Remove any contact lenses, and continue flushing eyes with running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Seek medical attention if irritation develops or persists.

SKIN CONTACT

Wash affected areas with plenty of water, and soap if available, for several minutes. Seek medical attention if irritation develops or persists.

INHALATION

Remove from area to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

INGESTION

Give 3-4 glasses of water, but **DO NOT** induce vomiting. If vomiting occurs, give fluids again. Get medical attention to determine whether vomiting or evacuation of stomach is necessary. Do not give anything by mouth to an unconscious or convulsing person.

5. FIRE FIGHTING MEASURES

Flash Point and Method: >200°F (PMCC)

GENERAL HAZARD

This product is not combustible.

EXTINGUISHING MEDIA

Use media suitable for the material that is burning.

SPECIAL FIRE FIGHTING INSTRUCTIONS

Move containers from area if it can be done without risk. Cool fire-exposed containers with water from side.

FIRE FIGHTING EQUIPMENT

As in any fire, wear NIOSH/MSHA approved, pressure-demand self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Spill area will be slippery. Wear appropriate protective equipment (See Section 8).

Absorb spills with vermiculite, fuller's earth, or sand. Shovel up and place in a non-metal waste container for disposal. Dike large spills with soil or sandbags to contain it and prevent its spread.

Prevent liquid from entering sewers or waterways.

7. HANDLING AND STORAGE

HANDLING

Wear appropriate protective equipment (See Section 8).

STORAGE

Keep container tightly closed. Keep away from heat, and sunlight. Storage temperature range: 20-30°C. If material freezes, separates or becomes hazy, gently thaw at about 40°C prior to use. Mild agitation may be required.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

In applications where the product will be exposed to elevated temperatures, use local ventilation to remove potential decomposition products.

PERSONAL PROTECTION FOR BULK HANDLING

Respirator: In operations where mists are generated, wear a NIOSH/MSHA approved respirator that has been selected by a technically qualified person for the specific work conditions.

Eye Protection: Wear safety glasses with side shields or goggles.

Gloves: Wear natural rubber gloves.

Clothing: Normal working clothing is generally adequate.

Other: Eye wash; safety shower.

EXPOSURE LIMITS

No limits established for this product

9. PHYSICAL AND CHEMICAL PROPERTIES

State..... Liquid solution
Viscosity..... Low viscosity
Color..... Water white to straw
Odor..... Mild
Melting Point °C..... NA
Freezing Point °C..... ND
Boiling Point °C..... 100°C
Weight per Gallon..... 8.3 lb/gal
Specific Gravity @20°C..... 1.00±0.00
Water Solubility..... Soluble
pH..... 5.5-7.0

10. STABILITY AND REACTIVITY

REACTIVITY

Stable

INCOMPATIBILITIES

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

Oxides of Carbon and Nitrogen on combustion.

CONDITIONS TO AVOID

Avoid contact with heat.

11. TOXICOLOGICAL INFORMATION

TOXICITY

No toxicity information is available for this specific material. The toxicity information provided is for components of this material and for closely related materials.

ACUTE

For Benzalkonium chloride:

- Oral LD₅₀ (rat): 295 mg/kg
- Dermal LD₅₀ (rabbit): 3000 mg/kg
- Eye irritation (rabbit): Mild to moderate irritant (<1% active)
- Skin irritation (rabbit): Severe irritant
- Skin corrosivity (rabbit-DOT method): Corrosive
- Skin sensitization (guinea pig-Magnusson-Kligman Maximization): Not a sensitizer
-

GENOTOXICITY/MUTAGENICITY

For Benzalkonium chloride:

- Ames test (Salmonella sp.): Not mutagenic with or without metabolic activation.

12. ECOLOGICAL INFORMATION

EC₅₀ (Bacterium toxicity)..... No data

LC₅₀ (Daphnia)..... No data

BOD..... No data

COD..... No data

Heavy metals..... No data

13. DISPOSAL CONSIDERATIONS

RCRA Waste Code: Not regulated under RCRA, 40 CFR 261

Products: Keep away from natural water sources. Observe all applicable federal, state, and local regulations.

Empty packaging: Remove all residue when emptying.

14. TRANSPORTATION INFORMATION

DOT Hazard Classification: Non-Hazardous, not regulated

15. REGULATORY INFORMATION
(Not meant to be all-inclusive, selected regulations represented)

OSHA HAZARD COMMUNICATION STANDARD (26 CFR 1910.1200)

☒ Hazardous ☐ Non-Hazardous

CERCLA/SUPERFUND (40 CFR 117, 302)

This product does not contain any chemicals subject to the reporting requirements of SARA Section 313.

SARA EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355)

This product does not contain any chemicals subject to the reporting requirements of SARA Section 313.

SARA HAZARD CATEGORIES (40 CFR 370)

☐ Acute ☒ Chronic ☐ Fire ☐ Pressure ☐ Reactive ☐ None

SARA TOXIC SUBSTANCES (40 CFR 372)

This product does not contain any chemicals subject to the reporting requirements of SARA Section 313.

TOXIC SUBSTANCES CONTROL ACT

For FDA/COSMETIC Use Only.

STATE REGULATIONS

None listed.

16. OTHER INFORMATION

ABBREVIATIONS

C:	Ceiling limit	N/A:	Not Applicable	N/D:	Not determined
N/E:	Not established	N/K:	Not known	RQ:	Reportable quantity
TPQ:	Threshold Planning Quantity				

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Prepared by: MSDS Coordinator

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