



**MICRELL® Antibacterial Lotion Soap**

Version 1.1      Revision Date: 02/10/2015      MSDS Number: 46592-00002      Date of last issue: 01/12/2015  
 Date of first issue: 01/12/2015

**Response:**

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Hazardous ingredients**

Chemical Name	CAS-No.	Concentration (%)
Ethanolamine	141-43-5	>= 1 - < 5
4-chloro-3,5-dimethylphenol	88-04-0	>= 0.1 - < 1

**SECTION 4. FIRST AID MEASURES**

- General advice : In the case of accident or if you feel unwell, seek medical advice immediately.  
 When symptoms persist or in all cases of doubt seek medical advice.
- If inhaled : If inhaled, remove to fresh air.  
 Get medical attention if symptoms occur.
- In case of skin contact : Wash with water and soap as a precaution.  
 Get medical attention if symptoms occur.
- In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.  
 If easy to do, remove contact lens, if worn.  
 Get medical attention.
- If swallowed : If swallowed, DO NOT induce vomiting.  
 Get medical attention if symptoms occur.  
 Rinse mouth thoroughly with water.
- Most important symptoms and effects, both acute and delayed : Causes serious eye irritation.
- Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.
- Notes to physician : Treat symptomatically and supportively.

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**SECTION 5. FIRE-FIGHTING MEASURES**

- Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Dry chemical  
Carbon dioxide (CO<sub>2</sub>)
- Unsuitable extinguishing media : None known.
- Specific hazards during fire fighting : Exposure to combustion products may be a hazard to health.
- Hazardous combustion products : Carbon oxides  
Metal oxides  
Sulfur oxides  
Nitrogen oxides (NO<sub>x</sub>)
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Use water spray to cool unopened containers.  
Remove undamaged containers from fire area if it is safe to do so.  
Evacuate area.
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.
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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Follow safe handling advice and personal protective equipment recommendations.
- Environmental precautions : Discharge into the environment must be avoided.  
Prevent further leakage or spillage if safe to do so.  
Prevent spreading over a wide area (e.g. by containment or oil barriers).  
Retain and dispose of contaminated wash water.  
Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material.  
For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container.  
Clean up remaining materials from spill with suitable absorbent.  
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

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Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

**SECTION 7. HANDLING AND STORAGE**

- Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
- Local/Total ventilation : Use only with adequate ventilation.
- Advice on safe handling : Avoid inhalation of vapor or mist.  
 Do not swallow.  
 Do not get in eyes.  
 Avoid prolonged or repeated contact with skin.  
 Handle in accordance with good industrial hygiene and safety practice.  
 Take care to prevent spills, waste and minimize release to the environment.
- Conditions for safe storage : Keep in properly labeled containers.  
 Store in accordance with the particular national regulations.
- Materials to avoid : Do not store with the following product types:  
 Strong oxidizing agents

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**
**Ingredients with workplace control parameters**

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Ethanolamine	141-43-5	TWA	3 ppm	ACGIH
		STEL	6 ppm	ACGIH
		TWA	3 ppm 8 mg/m <sup>3</sup>	NIOSH REL
		ST	6 ppm 15 mg/m <sup>3</sup>	NIOSH REL
		TWA	3 ppm 6 mg/m <sup>3</sup>	OSHA Z-1

**Hazardous components without workplace control parameters**

Ingredients	CAS-No.
4-chloro-3,5-dimethylphenol	88-04-0

- Engineering measures** : Ensure adequate ventilation, especially in confined areas.  
 Minimize workplace exposure concentrations.  
 Dust formation may be relevant in the processing of this product. In addition to substance-specific OELs, general limitations of concentrations of particulates in the air at workplaces have to be considered in workplace risk assessment. Relevant limits include: OSHA PEL for



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Particulates Not Otherwise Regulated of 15 mg/m<sup>3</sup> - total dust, 5 mg/m<sup>3</sup> - respirable fraction; and ACGIH TWA for Particles (insoluble or poorly soluble) Not Otherwise Specified of 3 mg/m<sup>3</sup> - respirable particles, 10 mg/m<sup>3</sup> - inhalable particles.

### Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Hand protection  
Material : Impervious gloves

Remarks : Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Eye protection : Wear the following personal protective equipment:  
Safety goggles

Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential. Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

Hygiene measures : Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Color : clear, colorless, yellow

Odor : floral

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Odor Threshold	:	No data available
pH	:	7 - 10
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	No data available
Flash point	:	> 100 °C
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Density	:	1.00 g/cm <sup>3</sup>
Solubility(ies)		
Water solubility	:	soluble
Partition coefficient: n-octanol/water	:	Not applicable
Autoignition temperature	:	No data available
Decomposition temperature	:	The substance or mixture is not classified self-reactive.
Viscosity		
Viscosity, kinematic	:	1 - 20 mm <sup>2</sup> /s (20 °C)
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

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**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	:	Not classified as a reactivity hazard.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Can react with strong oxidizing agents.
Conditions to avoid	:	None known.

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Incompatible materials                   : Oxidizing agents

Hazardous decomposition products       : No hazardous decomposition products are known.

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**SECTION 11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

Inhalation  
Skin contact  
Ingestion  
Eye contact

**Acute toxicity**

Not classified based on available information.

**Product:**

Acute oral toxicity                       : Acute toxicity estimate: > 5,000 mg/kg  
Method: Calculation method

Acute inhalation toxicity               : Acute toxicity estimate: > 40 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor  
Method: Calculation method

Acute dermal toxicity                    : Acute toxicity estimate: > 5,000 mg/kg  
Method: Calculation method

**Ingredients:****Ethanolamine:**

Acute oral toxicity                       : LD50 (Rat): 1,515 mg/kg

Acute inhalation toxicity               : Acute toxicity estimate: 11 mg/l  
Test atmosphere: vapor  
Method: Expert judgment  
Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI

Acute dermal toxicity                    : LD50 (Rabbit): 1,025 mg/kg

**4-chloro-3,5-dimethylphenol:**

Acute oral toxicity                       : Acute toxicity estimate: 500 mg/kg  
Method: Expert judgment  
Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI

Acute inhalation toxicity               : LC50 (Rat): > 6.29 mg/l  
Test atmosphere: dust/mist

Acute dermal toxicity                    : LD50 (Rat): > 2,000 mg/kg

**Skin corrosion/irritation**

Not classified based on available information.

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**Product:**

Result: No skin irritation

**Ingredients:****Ethanolamine:**

Species: Rabbit

Result: Corrosive after 3 minutes to 1 hour of exposure

**4-chloro-3,5-dimethylphenol:**

Result: Skin irritation

Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Ingredients:****Ethanolamine:**

Species: Rabbit

Result: Irreversible effects on the eye

**4-chloro-3,5-dimethylphenol:**

Result: Irreversible effects on the eye

**Respiratory or skin sensitization**

Skin sensitization: Not classified based on available information.

Respiratory sensitization: Not classified based on available information.

**Product:**

Assessment: Does not cause skin sensitization.

**Ingredients:****Ethanolamine:**

Test Type: Maximization Test (GPMT)

Routes of exposure: Skin contact

Species: Guinea pig

Result: negative

**4-chloro-3,5-dimethylphenol:**

Assessment: Probability or evidence of skin sensitization in humans

Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI

**Germ cell mutagenicity**

Not classified based on available information.

**Ingredients:****Ethanolamine:**

Genotoxicity in vitro

: Test Type: In vitro mammalian cell gene mutation test

Method: OECD Test Guideline 476

Result: negative

Genotoxicity in vivo

: Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)





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Species: Mouse  
 Application Route: Ingestion  
 Method: OECD Test Guideline 474  
 Result: negative

### 4-chloro-3,5-dimethylphenol:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
 Result: negative

### Carcinogenicity

Not classified based on available information.

#### IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### OSHA

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

### Reproductive toxicity

Not classified based on available information.

#### Ingredients:

#### Ethanolamine:

Effects on fertility : Test Type: Two-generation reproduction toxicity study  
 Species: Rat  
 Application Route: Ingestion  
 Result: negative

Effects on fetal development : Test Type: Embryo-fetal development  
 Species: Rat  
 Application Route: Ingestion  
 Method: OECD Test Guideline 414  
 Result: negative

### STOT-single exposure

Not classified based on available information.

#### Ingredients:

#### Ethanolamine:

Assessment: May cause respiratory irritation.

### STOT-repeated exposure

Not classified based on available information.

#### Ingredients:

#### Ethanolamine:

Routes of exposure: inhalation (dust/mist/fume)

Assessment: No significant health effects observed in animals at concentrations of 0.2 mg/l/6h/d

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or less.

**Repeated dose toxicity**
**Ingredients:**
**Ethanolamine:**

Species: Rat

NOAEL: 150 mg/m<sup>3</sup>

Application Route: inhalation (dust/mist/fume)

Exposure time: 28 d

**4-chloro-3,5-dimethylphenol:**

Species: Rabbit

LOAEL: 180 mg/kg

Application Route: Skin contact

Exposure time: 90 d

**Aspiration toxicity**

Not classified based on available information.

**SECTION 12. ECOLOGICAL INFORMATION**
**Ecotoxicity**
**Ingredients:**
**Ethanolamine:**

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): 349 mg/l  
 Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 65 mg/l  
 aquatic invertebrates Exposure time: 48 h

Toxicity to algae : ErC50 (Selenastrum capricornutum (green algae)): 2.8 mg/l  
 Exposure time: 72 h

NOEC (Scenedesmus capricornutum (fresh water algae)): 1 mg/l  
 Exposure time: 72 h

Toxicity to fish (Chronic : NOEC (Oryzias latipes (Orange-red killifish)): 1.24 mg/l  
 toxicity) Exposure time: 41 d

Toxicity to daphnia and other : NOEC (Daphnia magna (Water flea)): 0.85 mg/l  
 aquatic invertebrates Exposure time: 21 d  
 (Chronic toxicity)

Toxicity to bacteria : EC50 (Pseudomonas putida): 110 mg/l  
 Exposure time: 17 h

**4-chloro-3,5-dimethylphenol:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.76 mg/l  
 Exposure time: 96 h

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Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 7.7 mg/l  
Exposure time: 48 h

M-Factor (Acute aquatic toxicity) : 1

**Persistence and degradability****Ingredients:****Ethanolamine:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: > 90 %  
Exposure time: 21 d

**Bioaccumulative potential****Ingredients:****Ethanolamine:**

Partition coefficient: n-octanol/water : log Pow: -1.91

**4-chloro-3,5-dimethylphenol:**

Partition coefficient: n-octanol/water : log Pow: 3.27

**Mobility in soil**

No data available

**Other adverse effects**

No data available

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**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Dispose of as unused product.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.

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**SECTION 14. TRANSPORT INFORMATION****International Regulation****UNRTDG**

Not regulated as a dangerous good

**IATA-DGR**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

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### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### Domestic regulation

#### 49 CFR

Not regulated as a dangerous good

## SECTION 15. REGULATORY INFORMATION

### EPCRA - Emergency Planning and Community Right-to-Know

#### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Acute Health Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### US State Regulations

#### Pennsylvania Right To Know

Water	7732-18-5	70 - 90 %
Fatty acids, coco	61788-47-4	5 - 10 %
Oleic acid	112-80-1	1 - 5 %
Sodium sulphate	7757-82-6	1 - 5 %
Ethanolamine	141-43-5	1 - 5 %

#### New Jersey Right To Know

Water	7732-18-5	70 - 90 %
Fatty acids, coco	61788-47-4	5 - 10 %
Oleic acid	112-80-1	1 - 5 %
Sodium sulphate	7757-82-6	1 - 5 %
Ethanolamine	141-43-5	1 - 5 %

**California Prop 65** : This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

### The ingredients of this product are reported in the following inventories:

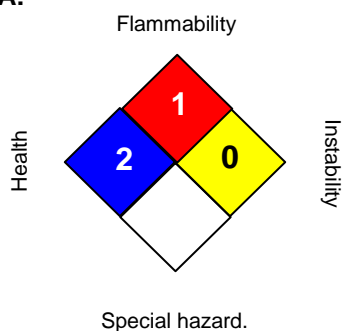
AICS : All ingredients listed or exempt.

### Inventories

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AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), NECSI (Taiwan), TSCA (USA)

**SECTION 16. OTHER INFORMATION**
**Further information**
**NFPA:**

**HMIS III:**

<b>HEALTH</b>	<b>2</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 = Slight,  
 2 = Moderate, 3 = High  
 4 = Extreme, \* = Chronic

**Full text of other abbreviations**

ACGIH	: USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL	: USA. NIOSH Recommended Exposure Limits
OSHA Z-1	: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA	: 8-hour, time-weighted average
ACGIH / STEL	: Short-term exposure limit
NIOSH REL / TWA	: Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST	: STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA Z-1 / TWA	: 8-hour time weighted average
Sources of key data used to compile the Material Safety Data Sheet	: Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <a href="http://echa.europa.eu/">http://echa.europa.eu/</a>
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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

SAFETY DATA SHEET



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