



# SAFETY DATA SHEET

Issue Date 01-Feb-2015

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Version 2

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

**Product Name** Commander

### Other means of identification

**Product Code** 31-005M

**Synonyms** None

### Details of the supplier of the safety data sheet

**Supplier Name** Navy Brand Mfg. Co.  
3670 Scarlet Oak Blvd.  
St. Louis, Mo. 63122  
800-325-3312

### Emergency telephone number

**Emergency Telephone** Chemtel 1-800-255-3924

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 5
Acute toxicity - Dermal	Not classified
Skin corrosion/irritation	Category 3

### Label elements

#### Emergency Overview

## Warning

#### **Hazard statements**

May be harmful if swallowed  
Causes mild skin irritation  
Harmful to aquatic life with long lasting effects

**Appearance** Opaque

**Physical state** Liquid

**Odor** Slight Ammonia

#### **Precautionary Statements - Prevention**

Avoid release to the environment

#### **Precautionary Statements - Response**

Call a POISON CENTER or doctor/physician if you feel unwell  
Specific Treatment (See Section 4 on the SDS)  
If skin irritation occurs: Get medical advice/attention

Immediately call a POISON CENTER or doctor/physician

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

##### Other Information

Unknown Acute Toxicity 0.309465% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Styrene Acrylic CoPolymer	Proprietary	10-30	*
Tributoxyethyl Phosphate	78-51-3	1-5	*
2-(2-ethoxyethoxy)ethanol	111-90-0	1-5	*
[2-(2-Methoxymethylethoxy)methylethoxy]-propanol	25498-49-1	1-5	*
Zinc Ammonium Chloride	38714-47-5	1-5	*
2-(2-methoxypropoxy)propanol	34590-94-8	1-5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

#### First aid measures

<b>Skin Contact</b>	Wash off immediately with plenty of water. Wash skin with soap and water.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Inhalation</b>	Remove to fresh air.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.

#### Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	Any additional important symptoms and effects are described in Section 11: Toxicology Information.
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#### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Treat symptomatically.
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### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** Caution: Use of water spray when fighting fire may be inefficient.

#### Specific hazards arising from the chemical

No Information available.

#### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

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

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation, especially in confined areas.

**Environmental precautions**

**Environmental precautions** See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** None known based on information supplied.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines** Exposure guidelines noted for ingredient(s).

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-(2-methoxypropoxy)propanol 34590-94-8	STEL: 150 ppm TWA: 100 ppm S*	TWA: 100 ppm TWA: 600 mg/m <sup>3</sup> (vacated) TWA: 100 ppm (vacated) TWA: 600 mg/m <sup>3</sup> (vacated) STEL: 150 ppm (vacated) STEL: 900 mg/m <sup>3</sup> (vacated) S* S*	IDLH: 600 ppm TWA: 100 ppm TWA: 600 mg/m <sup>3</sup> STEL: 150 ppm STEL: 900 mg/m <sup>3</sup>
Zinc oxide 1314-13-2	STEL: 10 mg/m <sup>3</sup> respirable fraction TWA: 2 mg/m <sup>3</sup> respirable fraction	TWA: 5 mg/m <sup>3</sup> fume TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 5 mg/m <sup>3</sup> fume (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) STEL: 10 mg/m <sup>3</sup> fume	IDLH: 500 mg/m <sup>3</sup> Ceiling: 15 mg/m <sup>3</sup> dust TWA: 5 mg/m <sup>3</sup> dust and fume STEL: 10 mg/m <sup>3</sup> fume

*NIOSH IDLH Immediately Dangerous to Life or Health*

**Other Information**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

**Engineering Controls** Showers, Eyewash stations & Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** No Information available. Avoid contact with eyes.

**Skin and body protection** No Information available. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

**Physical state** Liquid  
**Appearance** Opaque  
**Color** White  
**Odor** Slight Ammonia  
**Odor threshold** No Information available

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>	8.5 - 9.5	
<b>Specific Gravity</b>	1.055	
<b>Viscosity</b>	<100 cP @ 25°C	
<b>Melting point/freezing point</b>	No Information available	
<b>Flash point</b>	>200 Above 200°F	
<b>Boiling point / boiling range</b>	>= 212 ° F (at 760 mm Hg)	
<b>Evaporation rate</b>	No Information available	
<b>Flammability (solid, gas)</b>		
<b>Flammability Limits in Air</b>		
<b>Upper flammability limit:</b>	No Information available	
<b>Lower flammability limit:</b>	No Information available	
<b>Vapor pressure</b>	No Information available	
<b>Vapor density</b>	No Information available	
<b>Water solubility</b>	No Information available	
<b>Partition coefficient</b>	No Information available	
<b>Autoignition temperature</b>	No Information available	
<b>Decomposition temperature</b>	No Information available	

**Other Information**

**Density Lbs/Gal** 8.80  
**VOC Content (%)** 7.85

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**Incompatible materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure****Product Information**

<b>Inhalation</b>	No data available. Avoid breathing vapors or mists.
<b>Eye contact</b>	No data available. Avoid contact with eyes.
<b>Skin Contact</b>	Avoid contact with skin. Causes mild skin irritation.
<b>Ingestion</b>	May be harmful if swallowed. Do not taste or swallow. Not an expected route of exposure.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Polyethylene Emulsion	> 10000 mg/kg ( Rat )	-	-
Polypropylene Emulsion	> 10000 mg/kg ( Rat )	-	-
2-(2-ethoxyethoxy)ethanol 111-90-0	= 1920 mg/kg ( Rat )	= 4200 µL/kg ( Rabbit ) = 6 mL/kg ( Rat )	> 5240 mg/m <sup>3</sup> ( Rat ) 4 h
2-(2-methoxypropoxy)propanol 34590-94-8	= 5230 mg/kg ( Rat )	= 9500 mg/kg ( Rabbit )	-

**Information on toxicological effects**

**Symptoms** No Information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Sensitization</b>	No Information available.
<b>Germ cell mutagenicity</b>	No Information available.
<b>Carcinogenicity</b>	No Information available.
<b>Reproductive toxicity</b>	No Information available.
<b>STOT - single exposure</b>	No Information available.
<b>STOT - repeated exposure</b>	No Information available.
<b>Target organ effects</b>	Central nervous system, EYES, Respiratory system.
<b>Aspiration hazard</b>	No Information available.

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 0.309465% of the mixture consists of ingredient(s) of unknown toxicity

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

39.47245% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Tributoxyethyl Phosphate 78-51-3	-	10.4 - 12.0: 96 h Pimephales promelas mg/L LC50 flow-through	-
2-(2-ethoxyethoxy)ethanol 111-90-0	-	10000: 96 h Lepomis macrochirus mg/L LC50 static 19100 - 23900: 96 h Lepomis macrochirus mg/L LC50 flow-through 11400 - 15700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 11600 - 16700: 96 h Pimephales promelas mg/L LC50 flow-through 13400: 96 h Salmo gairdneri mg/L LC50 flow-through	3940 - 4670: 48 h Daphnia magna mg/L EC50
[2-(2-Methoxymethylethoxy)methylethoxy]-propanol 25498-49-1	-	11619: 96 h Pimephales promelas mg/L LC50 static	10: 48 h Daphnia magna mg/L EC50
2-(2-methoxypropoxy)propanol 34590-94-8	-	10000: 96 h Pimephales promelas mg/L LC50 static	1919: 48 h Daphnia magna mg/L LC50
Methyl Chloro Isothiazolinone 26172-55-4	0.11 - 0.16: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 0.03 - 0.13: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 0.31: 120 h Anabaena flos-aquae mg/L EC50	1.6: 96 h Oncorhynchus mykiss mg/L LC50 semi-static	4.71: 48 h Daphnia magna mg/L EC50 0.12 - 0.3: 48 h Daphnia magna mg/L EC50 Flow through 0.71 - 0.99: 48 h Daphnia magna mg/L EC50 Static
Magnesium Chloride 7786-30-3	2200: 72 h Desmodesmus subspicatus mg/L EC50	1970 - 3880: 96 h Pimephales promelas mg/L LC50 static 4210: 96 h Gambusia affinis mg/L LC50 static	140: 48 h Daphnia magna mg/L EC50 Static 1400: 24 h Daphnia magna mg/L EC50

**Persistence and degradability**

No Information available.

**Bioaccumulation**

No Information available.

Chemical Name	Partition coefficient
Tributoxyethyl Phosphate 78-51-3	4.78
2-(2-ethoxyethoxy)ethanol 111-90-0	-0.8
2-(2-methoxypropoxy)propanol 34590-94-8	-0.064

**Other adverse effects**

No Information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Zinc Ammonium Chloride 38714-47-5	Toxic

## 14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

**DOT** Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

**TSCA** Complies  
**DSL/NDSL** Complies

### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
2-(2-ethoxyethoxy)ethanol - 111-90-0	1.0
[2-(2-Methoxymethylethoxy)methylethoxy]-propanol - 25498-49-1	1.0
Zinc Ammonium Chloride - 38714-47-5	1.0
2-(2-methoxypropoxy)propanol - 34590-94-8	1.0

#### SARA 311/312 Hazard Categories

**Acute health hazard** No  
**Chronic Health Hazard** No  
**Fire hazard** No  
**Sudden release of pressure hazard** No  
**Reactive Hazard** No

#### CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc Ammonium Chloride 38714-47-5	-	X	-	-

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### US State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals

#### U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
2-(2-ethoxyethoxy)ethanol 111-90-0	X	-	X

[2-(2-Methoxymethylethoxy)methylethoxy]-propanol 25498-49-1	X	-	X
Zinc Ammonium Chloride 38714-47-5	X	-	X
2-(2-methoxypropoxy)propano 34590-94-8	X	X	X
Magnesium Nitrate 10377-60-3	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not Applicable

**16. OTHER INFORMATION**

<b>NFPA</b>	Health hazards 1	Flammability 0	Instability 0	Physical and Chemical Properties Yes
<b>HMIS</b>	Health hazards 1	Flammability 0	Physical hazards 0	Personal protection B

Issue Date 01-Feb-2015  
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Revision Note  
 No Information available

**Disclaimer**

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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

**End of Safety Data Sheet**