



# LDA-445 (7312)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Revision Date: 01/27/2016

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

### 7312 Product Identifier

Product Form: Mixture

Product Name: LDA-445

Product Code: 7312

### Intended Use of the Product

Use of the Substance/Mixture: Neutral metal cleaner. For professional use only.

### Name, Address, and Telephone of the Responsible Party

#### Company

Better Engineering Mfg., Inc.

8361 Town Center Court

Baltimore, MD 21236 USA

T: 800-229-3380

[www.betterengineering.com](http://www.betterengineering.com)

### Emergency Telephone Number

Emergency number : 1-800-535-5053 (INFOTRAC)

## SECTION 2: HAZARDS IDENTIFICATION

### Classification of the Substance or Mixture

#### Classification (GHS-US)

Skin Irrit. 2 H315

Eye Dam. 2A H319

Aquatic Acute 3 H402

### Label Elements

#### GHS-US Labeling

Hazard Pictograms (GHS-US) :



Signal Word (GHS-US) :

Warning.

Hazard Statements (GHS-US) :

H315 - Causes skin irritation  
H319 - Causes severe eye irritation  
H402- Harmful to aquatic life

Precautionary Statements (GHS-US) :

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves, protective clothing, eye protection, face protection, respiratory protection.  
P302 +P352 -If on skin: Wash with plenty of soap and 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 section 4).  
P332 +P313 - If skin irritation occurs: Get medical advice/attention.  
P337 +P313 - If eye irritation persists: Get medical advice/attention  
P362 - Take off contaminated clothing and wash before reuse.  
P501 - Dispose of contents/container to local, regional, national, territorial, provincial, and international regulations.

### Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. When heated to decomposition, emits toxic fumes.

Unknown Acute Toxicity (GHS-US) Not available

# LDA-445 (7312)

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### Substances

##### Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Water	(CAS No) 7732-18-5	80-90	Not classified
Acylamidocarboxylic acid mixture	Proprietary	10-20	Skin Irrit 2, H315 Eye Irrit 2B, H320
Alcohols, C10-16, ethoxylated propoxylated	(CAS No) 69227-22-1	1-5	Not classified
Tetrasodium EDTA	(CAS No) 64-02-8	1-5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Eye Dam. 1, H318 Aquatic Acute 2, H401
b-Alanine, N-(2-carboxyethyl)-N-(3-(decyloxy)Propyl)-,monosodium salt	(CAS No) 64972-19-6	0.1-1	Not classified

Full text of H-phrases: see section 16

### SECTION 4: FIRST AID MEASURES

#### Description of First Aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

**Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician.

**Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

**Ingestion:** Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

#### Most Important Symptoms and Effects Both Acute and Delayed

**General:** Causes skin and eye irritation.

**Inhalation:** None

**Skin Contact:** Contact may cause irritation

**Eye Contact:** Causes serious eye irritation.

**Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** Not available

#### Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

### SECTION 5: FIREFIGHTING MEASURES

#### Extinguishing Media

**Suitable Extinguishing Media:** Water spray, fog, carbon dioxide, foam, dry chemical.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

#### Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not flammable.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Thermal decomposition generates: Carbon dioxide, nitrogen oxides, sodium oxides.

#### Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides, sodium oxides.

**Other information:** Do not allow run-off from firefighting to enter drains or water courses.

# LDA-445 (7312)

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### Reference to Other Sections

Refer to section 9 for flammability properties.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions, Protective Equipment and Emergency Procedures**

**General Measures:** Avoid contact with skin and eyes.

#### **For Non-Emergency Personnel**

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### **For Emergency Personnel**

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** None

### **Environmental Precautions**

Prevent entry to sewers and public waters. Avoid release to the environment.

### **Methods and Material for Containment and Cleaning Up**

**For Containment:** Absorb and/or contain spill with inert material, then place in suitable container. Cautiously neutralize spilled liquid.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material, then place in suitable container. Cautiously neutralize spilled liquid

### **Reference to Other Sections**

See heading 8, Exposure Controls and Personal Protection.

## **SECTION 7: HANDLING AND STORAGE**

### **Precautions for Safe Handling**

**Additional Hazards When Processed:** None

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling. Wash contaminated clothing before reuse.

### **Conditions for Safe Storage, Including Any Incompatibilities**

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from extremely low temperatures, incompatible materials.

**Incompatible Materials:** Strong oxidizers.

**Specific End Use(s):** Neutral metal cleaner. For professional use only.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control Parameters**

No Occupational Exposure Limits (OELs) have been established for this product or any of its chemical components.

### **Exposure Controls**

**Appropriate Engineering Controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

**Personal Protective Equipment:** Protective goggles. Face shield Gloves.



**Materials for Protective Clothing:** None usually needed.

**Hand Protection:** None usually needed.

**Eye Protection:** Chemical goggles.

**Skin and Body Protection:** None usually needed.

**Respiratory Protection:** None usually needed.

**Other Information:** When using, do not eat, drink or smoke.

# LDA-445 (7312)

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Clear, Pale amber
Odor	: Mild
Odor Threshold	: Not available
pH	: 8.0
Relative Evaporation Rate (butylacetate=1)	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: 103 °C (217°F)
Flash Point	: None
Auto-ignition Temperature	: None
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not flammable
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Specific Gravity	: 1.03
Solubility	: Complete.
Log Pow	: Not available
Log Kow	: Not available
Viscosity, Kinematic	: Not available
Viscosity, Dynamic	: Not available
Explosion Data – Sensitivity to Mechanical Impact	: Not available
Explosion Data – Sensitivity to Static Discharge	: Not available

### SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Thermal decomposition generates: Carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides, sodium oxides.

**Chemical Stability:** Stable at standard temperature and pressure.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Extremely low temperatures. Incompatible materials.

**Incompatible Materials:** Strong oxidizers.

**Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>).

### SECTION 11: TOXICOLOGICAL INFORMATION

#### Information on Toxicological Effects - Product

**Acute Toxicity:** Not classified

**LD50 and LC50 Data:** Not available

**Skin Corrosion/Irritation:** Causes skin irritation. **pH:** 8.0

**Serious Eye Damage/Irritation:** Causes serious eye damage. **pH:** 8.0

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Teratogenicity:** Not available

**Carcinogenicity:** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

# LDA-445 (7312)

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** None.

**Symptoms/Injuries After Skin Contact:** Contact may cause irritation.

**Symptoms/Injuries After Eye Contact:** Causes serious eye damage.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

### Information on Toxicological Effects - Ingredient(s)

#### LD50 and LC50 Data:

<b>Water (7732-18-5)</b>	
LD50 Oral Rat	> 90000 mg/kg
<b>b-Alanine, N-(2-carboxyethyl)-N-(3-(decyloxy)Propyl)-,monosodium salt (64972-19-6)</b>	
LD50 Oral Rat (mg/l)	16800 mg/kg
<b>Tetrasodium EDTA (64-02-8)</b>	
LD50 Oral Rat	1780 mg/kg
<b>Alcohols, C10-16, ethoxylated propoxylated (69227-22-1)</b>	
LD50 Oral	>2000 mg/kg

## SECTION 12: ECOLOGICAL INFORMATION

### Toxicity

**Ecology - General:** Harmful to aquatic life.

<b>Tetrasodium EDTA (64-02-8)</b>	
LC50 Fish 1	41 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Other Aquatic Organisms 1	1.01 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)
LC 50 Fish 2	59.8 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
<b>b-Alanine, N-(2-carboxyethyl)-N-(3-(decyloxy)Propyl)-,monosodium salt (64972-19-6)</b>	
LC50 Fish 1	60.6mg/l (Exposure time: 96 h- Species:Pimephales promelas
LC50 Fish 2	100-250 mg/l (Exposure time: 24 h- Species:Pimephales promelas
<b>Alcohols, C10-16, ethoxylated propoxylated (69227-22-1)</b>	
LC50 Fish 1	>1-10 mg/l
EC50 Aquatic Invertebrates	>1-10 mg/l
EC50 Aquatic Plants	>1-10 mg/l

### Persistence and Degradability

<b>LD-445 (7312)</b>	
Persistence and Degradability	Not established.

### Bioaccumulative Potential

<b>LD-445 (7312)</b>	
Bioaccumulative Potential	Not established.

**Mobility in Soil** Not available

### Other Adverse Effects

**Other Information:** Not established

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

## SECTION 14: TRANSPORT INFORMATION

**14.1 In Accordance with DOT** Not regulated for transport

**14.2 In Accordance with IMDG** Not regulated for transport

**14.3 In Accordance with IATA** Not regulated for transport

**14.4 In Accordance with TDG** Not regulated for transport

# LDA-445 (7312)

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 15: REGULATORY INFORMATION


#### US Federal Regulations

<b>LDA-445 (7312)</b>	
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard
<b>Water (7732-18-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>b-Alanine, N-(2-carboxyethyl)-N-(3-(decyloxy) Propyl)-, monosodium salt (64972-19-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Acylamidocarboxylic acid mixture (Proprietary)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Tetrasodium EDTA (64-02-8)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Alcohols, C10-16, ethoxylated propoxylated (69227-22-1)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

#### US State Regulations

<b>Tetrasodium EDTA (64-02-8)</b>	
U.S. - Texas - Effects Screening Levels - Long Term	
U.S. - Texas - Effects Screening Levels - Short Term	

#### Canadian Regulations

<b>LDA-445 (7312)</b>	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
	

<b>Water (7732-18-5)</b>	
Listed on the Canadian DSL (Domestic Substances List) inventory.	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

<b>b-Alanine, N-(2-carboxyethyl)-N-(3-(decyloxy)Propyl)-, monosodium salt (64972-19-6)</b>	
Listed on the Canadian DSL (Domestic Substances List) inventory.	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

<b>Tetrasodium EDTA (64-02-8)</b>	
Listed on the Canadian DSL (Domestic Substances List) inventory.	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

<b>Alcohols, C10-16, ethoxylated propoxylated (69227-22-1)</b>	
Listed on the Canadian DSL (Domestic Substances List) inventory.	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

### SECTION 16: OTHER INFORMATION

<b>Revision date</b>	: 01/27/2016
<b>Other Information</b>	: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

# LDA-445 (7312)

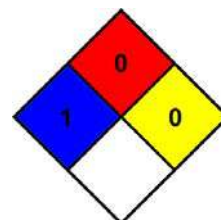
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According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### GHS Full Text Phrases:

Acute Tox. 4 (Inhalation: dust, mist)	Acute toxicity (Inhalation: dust, mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 2	Hazardous to the aquatic environment – Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the aquatic environment – Acute Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Skin Irrit. 2	Skin corrosion/irritation Category 2
H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H320	May cause serious eye irritation
H332	Harmful if inhaled
H401	Toxic to aquatic life
H402	Harmful to aquatic life

- NFPA Health Hazard** : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
- NFPA Fire Hazard** : 0 - Materials that will not burn.
- NFPA Reactivity** : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



### HMIS III Rating

- Health** : 1 Slight Hazard - Irritation or minor reversible injury possible
- Flammability** : 0 Minimal Hazard
- Physical** : 0 Minimal Hazard

### Party Responsible for the Preparation of This Document

Better Engineering Mfg., Inc.  
8361 Town Center Court  
Baltimore, MD 21236 USA  
800-229-3380

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

North America GHS US 2012 & WHMIS