

**CHEMSTATION®**  
www.chemstation.com

**12237**

**GENERAL PURPOSE SHACKLE CLEANER**



**Warning**

H316 Causes mild skin irritation.

H319 Causes serious eye irritation.

**Prevention:**

Wash thoroughly after handling.

Wear protective gloves, eye protection, face protection.

**Response:**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

If skin irritation occurs: Get medical advice or attention.

If eye irritation persists: Get medical advice or attention.

**Storage:**

No GHS storage statements

**Disposal:**

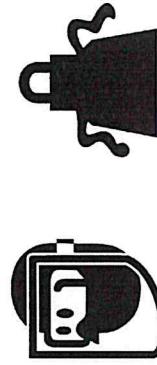
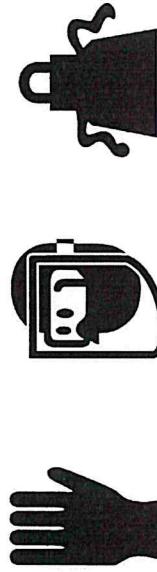
No GHS disposal statements

**Directions:**

FOR INDUSTRIAL USE ONLY: Contact your sales representative for product usage.

**Dilutions:**

1-10% typical







Safety Data Sheet (SDS)  
12237

SDS Revision Date: 02/05/2021

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product Identity 12237

Alternate Names 12237

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use Contact ChemStation representative.

Application Method Contact ChemStation representative.

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

Company Name ChemStation  
2360 W Dorothy Lane Ste 112  
Dayton, OH 45439

Emergency (800) 424-9300  
CHEMTREC (USA)  
Customer Service: ChemStation (937) 534-0410

## 2. Hazard identification of the product

### 2.1. Classification of the substance or mixture

Skin Irrit. 3;H316 Causes mild skin irritation. (Note: this GHS classification was not adopted by US OSHA).  
Eye Irrit. 2;H319 Causes serious eye irritation.

### 2.2. Label elements



Warning

H316 Causes mild skin irritation.

H319 Causes serious eye irritation.

#### [Prevention]:

P264 Wash thoroughly after handling.

P280 Wear protective gloves, eye protection, face protection.

#### [Response]:

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P332+313 If skin irritation occurs: Get medical advice or attention.

P337+313 If eye irritation persists: Get medical advice or attention.

#### [Storage]:

No GHS storage statements

#### [Disposal]:

No GHS disposal statements

### 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
2-Butoxy-ethanol CAS Number: 0000111-76-2	1.0 - 10	Acute Tox. 4;H332 Acute Tox. 4;H312 Acute Tox. 4;H302 Eye Irrit. 2;H319 Skin Irrit. 2;H315	[1][2]
1-tert-Butoxypropan-2-ol CAS Number: 0057018-52-7	1.0 - 10	Flam. Liq. 3;H226 Eye Dam. 1;H318	[1]

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] FBT-substance or vPvB-substance.

\*The full texts of the phrases are shown in Section 16.

### Section 4. First-aid measures

#### 4.1. Description of first aid measures

**General** In all cases of doubt, or when symptoms persist, seek medical attention.  
Never give anything by mouth to an unconscious person.

**Inhalation** Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

**Eyes** Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

**Skin** Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

**Ingestion** If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

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

**Overview** No specific symptom data available.  
Check section 2.2 (GHS Label Elements) for further details.

**Eyes** Causes serious eye irritation.

**Skin** Causes mild skin irritation. (Note: this GHS classification was not adopted by US OSHA).

### Section 5. Fire-fighting measures

#### 5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO<sub>2</sub>, powder, water spray.

Unsuitable extinguishing media: Do not use; water jet.

#### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

#### 5.3. Advice for fire-fighters

Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from fire fighting to enter drains or water ways.

ERG Guide No. 0

### Section 6. Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

#### 6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

### 6.3. Methods and material for containment and cleaning up

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations. (See section 13).

Clean, preferably with a detergent. Do not use solvents.

Do not allow spills to enter drains or watercourses.

If drains, sewers, streams or lakes are contaminated, inform the local water company immediately. In the case of contamination of rivers, streams or lakes the Environmental Protection Agency should also be informed.

## Section 7. Handling and storage

### 7.1. Precautions for safe handling

Check section 2.2 (GHS Label Elements) for further details. - [Prevention]:

### 7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Incompatible materials: No data available.

Check section 2.2 (GHS Label Elements) for further details. - [Storage]:

### 7.3. Specific end use(s)

No data available.

## Section 8. Exposure controls / personal protection

### 8.1. Control parameters

#### Exposure

CAS No.	Ingredient	Source	Value
0000111-76-2	2-Butoxy-ethanol	OSHA	TWA 50 ppm(240 mg/m <sup>3</sup> ) [skin]
		ACGIH	TWA: 20 ppm Revised 2003,
		NIOSH	TWA 5 ppm(24 mg/m <sup>3</sup> ) [skin]
		Supplier	No Established Limit
0057018-52-7	1-tert-Butoxypropan-2-ol	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

#### Carcinogen Data

CAS No.	Ingredient	Source	Value
0000111-76-2	2-Butoxy-ethanol	OSHA	Regulated Carcinogen: Nb
		NTP	Known: Nb; Suspected: Nb
		IARC	Group 1: Nb; Group 2a: Nb; Group 2b: Nb; Group 3: Yes; Group 4: Nb;
0057018-52-7	1-tert-Butoxypropan-2-ol	OSHA	Regulated Carcinogen: Nb
		NTP	Known: Nb; Suspected: Nb
		IARC	Group 1: Nb; Group 2a: Nb; Group 2b: Nb; Group 3: Yes; Group 4: Nb;

### 8.2. Exposure controls

**Respiratory** If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

**Eyes** Wear safety glasses with side shields to protect the eyes. An eye wash station is suggested as a good workplace practice.

**Skin** Keep skin contact to a minimum.

**Engineering Controls** Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

**Other Work Practices** Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Check section 2.2 (GHS Label Elements) for further details. - [Prevention]:

## Section 9. Physical and chemical properties

Appearance	Yellow liquid
Odor	Mild, soap
Odor threshold	Not Measured
pH	10.0 - 10.6
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	212 deg F
Flash Point	>200 degrees F PMCC (non-flammable)
Evaporation rate (Ether = 1)	0.33
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	<b>Lower Explosive Limit:</b> Not Measured <b>Upper Explosive Limit:</b> Not Measured
Vapor pressure (Pa)	Not Determined
Vapor Density	Not Determined
Relative Density	1.005 - 1.015
Solubility in Water	Not Measured
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
Foaming	High

### 9.2. Other information

No other relevant information.

## Section 10. Stability and reactivity

### 10.1. Reactivity

Hazardous Polymerization will not occur.

### 10.2. Chemical stability

Stable under normal circumstances.

### 10.3. Possibility of hazardous reactions

No data available.

### 10.4. Conditions to avoid

No data available.

### 10.5. Incompatible materials

No data available.

### 10.6. Hazardous decomposition products

No hazardous decomposition data available.

## Section 11. Toxicological information

### Acute toxicity

2-butoxyethanol and its acetate are readily absorbed through the skin and will cause harmful effects on the blood.

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm

2-Butoxy-ethanol - (111-76-2)	1,414.00, Guinea Pig - Category: 4	1,200.00, Guinea Pig - Category: 4	No data available	No data available	No data available
1-tert-Butoxypropan-2-ol - (57018-52-7)	3,771.00, Rat - Category: 5	>2,000.00, Rat - Category: 5	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	—	Not Applicable
Acute toxicity (dermal)	—	Not Applicable
Acute toxicity (inhalation)	—	Not Applicable
Skin corrosion/irritation	3	Causes mild skin irritation. (Note: this GHS classification was not adopted by US OSHA).
Serious eye damage/iritation	2	Causes serious eye irritation.
Respiratory sensitization	—	Not Applicable
Skin sensitization	—	Not Applicable
Germ cell mutagenicity	—	Not Applicable
Carcinogenicity	—	Not Applicable
Reproductive toxicity	—	Not Applicable
STOT-single exposure	—	Not Applicable
STOT-repeated exposure	—	Not Applicable
Aspiration hazard	—	Not Applicable

## Section 12. Ecological information

### 12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

#### Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
2-Butoxy-ethanol - (111-76-2)	1,474.00, <i>Oncorhynchus mykiss</i>	1,550.00, <i>Daphnia magna</i>	1,840.00 (72 hr), <i>Pseudokirchneriella subcapitata</i>
1-tert-Butoxypropan-2-ol - (57018-52-7)	Not Available	Not Available	Not Available

### 12.2. Persistence and degradability

This product is fully biodegradable.

### 12.3. Bioaccumulative potential

Not Measured

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

### 12.6. Other adverse effects

No data available.

## Section 13. Disposal considerations

### 13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

## Section 14. Transport information

14.1. UN number	Not Applicable
14.2. UN proper shipping name	Compound, Cleaning,N.O.I., Liquid
14.3. Transport hazard class(es)	Not Applicable
14.4. Packing group	Not Applicable

## Section 15. Regulatory information

**Regulatory Overview** The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

**Toxic Substance Control Act (TSCA)** All components of this material are either listed or exempt from listing on the TSCA Inventory.

**WHMIS 1988 Classification** D2B

**US EPA Tier II Hazards**

Fire:	
Sudden Release of Pressure:	
Reactive:	
Immediate (Acute):	
Delayed (Chronic):	

**EPCRA 311/312 Chemicals and RQs:**  
(No Product Ingredients Listed)

**EPCRA 302 Extremely Hazardous:**  
(No Product Ingredients Listed)

**EPCRA 313 Toxic Chemicals:**

2-Butoxy-ethanol

**Proposition 65 - Carcinogens (>0.0%):**

1-tert-Butoxypropan-2-ol

**Proposition 65 - Developmental Toxins (>0.0%):**  
(No Product Ingredients Listed)

**Proposition 65 - Female Repro Toxins (>0.0%):**  
(No Product Ingredients Listed)

**Proposition 65 - Male Repro Toxins (>0.0%):**  
(No Product Ingredients Listed)

**N.J. RTK Substances (>1%):**

2-Butoxy-ethanol

**Penn RTK Substances (>1%):**

2-Butoxy-ethanol

## Section 16. Other information

**Issue Date** 02/05/2021  
**Revision History** 02/05/2021

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H226 Flammable liquid and vapor.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

End of Document

1

2

3

## General Purpose Shackle Cleaner

**12237**

Conforms to USDA Guidelines - A-1

### PRODUCT DESCRIPTION

- ◆ ChemStation Product 12237 is a highly concentrated, mildly alkaline cleaner formulated specifically for use as a foaming degreaser. It is especially effective in applications such as presoak and pressure washing.
- ◆ Product 12237 can be used to remove a wide range of soils on aluminum, stainless steel, walls, floors, piping and other hard-to-reach areas.
- ◆ Product 12237 can be used in mop buckets, spray bottles and automatic scrubbers.
- ◆ Product 12237 is a balanced blend of biodegradable surfactants and alkaline builders.
- ◆ Product 12237 generates a moderate foam that clings to vertical surfaces and rinses easily.
- ◆ When used as directed, this product is safe and suitable for use in a USDA inspected facility, as a general cleaning agent on all surfaces, or for use with steam or mechanical cleaning devices, in all departments of official establishments operating under the Federal meat, poultry, shell egg grading, and egg products inspection programs.

### FEATURES

- ◆ High Reserve Alkalinity ..... Effectively penetrates and removes heavy grease and oil deposits.
- ◆ Liquid..... Convenient to use; easy dispensing and controlling.
- ◆ Hard Water Tolerant..... No filming or spotting, even in hard water.

### BENEFITS

- ◆ Appearance ..... Liquid
- ◆ Color ..... Clear, Yellow
- ◆ Odor ..... Mild
- ◆ Solubility ..... Complete
- ◆ pH neat..... 10.3
- ◆ Specific Gravity ..... 1.010
- ◆ Foaming..... Moderate
- ◆ Flash Point ..... >200°F (nonflammable)

### TYPICAL INSPECTIONS

- ◆ Consult sales representative for recommendation.

### DILUTION

- ◆ Keep out of the reach of children. For industrial and commercial use only.
- ◆ Safety Data Sheets available with delivery or upon request.
- ◆ Read label instructions and SDS carefully.

### SAFETY

May 5, 2021





May 5, 2021

Mr. Eric Wuebker  
ChemStation  
2360 W. Dorothy Ln., Ste 112  
Dayton, OH 45439

Dear Eric,

This letter is in reply to your request for compound authorization received on May 5, 2021 for ChemStation Product 12237.

When used according to label directions, this product is safe and suitable for use in a USDA inspected facility, as a general cleaning agent on all surfaces, or for use with steam or mechanical cleaning devices, in all departments of official establishments operating under the Federal meat, poultry, shell egg grading, and egg products inspection programs.

Before using this compound, food products and packaging materials must be removed from the room or carefully protected. After using this compound, surfaces must be thoroughly rinsed with potable water.

When used according to label directions, this product meets the requirements of 21 CFR117.35 (b) Substances used in Cleaning and Sanitizing; Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food.

Sincerely,

Katie Overton  
Project Coordinator  
ChemStation International

