

Issue Date: 17-Nov-2014

Revision Date: 02-Sep-2015

Version 2

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier**

**Product Name** United 312 BOILERMATE

**Other means of identification**

**SDS #** UNITED-312

**UN/ID No** UN1824

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Synthetic Polymer Liquid Steam Boiler Treatment.

**Uses Advised Against** For industrial and institutional use only.

**Details of the supplier of the safety data sheet**

**Supplier Address**

United Laboratories, Inc.  
320 37th Avenue  
St. Charles, IL 60174  
www.unitedlabsinc.com  
www.unitedlabsinc.ca

**Emergency Telephone Number**

**Company Phone Number** 800-323-2594 (to reorder)  
**Emergency Telephone (24 hr)** INFOTRAC 1-800-535-5053 (North America)  
1-352-323-3500 (International)

**2. HAZARDS IDENTIFICATION**

**Appearance** Pale amber liquid

**Physical State** Liquid

**Odor** Very slight

**Classification**

Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1

**Signal Word**

**Danger**

**Hazard Statements**

Causes severe skin burns and eye damage



**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray.  
 Wash face, hands and any exposed skin thoroughly after handling.  
 Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary Statements - Response**

Immediately call a poison center or doctor/physician.  
 IF IN EYES: 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.  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 Wash contaminated clothing before reuse.  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 Immediately call a poison center or doctor/physician.  
 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

**Precautionary Statements - Storage**

Store according to local rules and regulations.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Sodium Metabisulfite	7681-57-4	1-10
Caustic Soda	1310-73-2	1-10
Soda Ash	497-19-8	1-10

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST-AID MEASURES

**First Aid Measures**

<b>General Advice</b>	Immediately call a poison center or doctor/physician.
<b>Eye Contact</b>	Flush with plenty of water for at least 15 minutes while holding eyelids open. Immediately call a poison center or doctor/physician.
<b>Skin Contact</b>	Flush area with water while removing contaminated clothing. Follow by washing with soap and water. If irritation persists, call a physician or poison control center.
<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Apply CPR if needed. Immediately call a poison center or doctor/physician.
<b>Ingestion</b>	Rinse mouth. Do not induce vomiting. If conscious, dilute with several glasses of water. Call a physician or poison control center immediately.

**Most important symptoms and effects**

<b>Symptoms</b>	Causes severe skin burns and eye damage. Inhalation can cause damage to the upper respiratory tract and to the lung tissue depending on the extent of the exposure. Ingestion can cause diarrhea, vomiting, burns, tissue ulceration and internal bleeding.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically.
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## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Water. Foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical.

**Unsuitable Extinguishing Media** Not determined.

### Specific Hazards Arising from the Chemical

May produce sulfur dioxide upon extreme heating. May react with active metals (aluminum, zinc and magnesium) liberating hydrogen gas.

**Hazardous Combustion Products** When strongly heated, as in a fire, this product may produce carbon dioxide, carbon monoxide and sulfur dioxide.

### 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** Use personal protective equipment as required.

### Methods and material for containment and cleaning up

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

**Methods for Clean-Up** Spills should be contained and stored in a safe place to await proper treatment or disposal. Wear adequate personal protective equipment and clothing.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on Safe Handling** Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing and eye/face protection. Remove contaminated clothing and wash before reuse.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store locked up. Keep in a properly labeled, tightly closed container and store in a cool, dry well-ventilated area. Do not let containers freeze as they may split or rupture.

**Incompatible Materials** Will react vigorously with strong acids and oxidizers. Will react with active metals (aluminum, zinc and magnesium) liberating hydrogen gas.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium Metabisulfite 7681-57-4	TWA: 5 mg/m <sup>3</sup>	(vacated) TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
Caustic Soda 1310-73-2	Ceiling: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> (vacated) Ceiling: 2 mg/m <sup>3</sup>	IDLH: 10 mg/m <sup>3</sup> Ceiling: 2 mg/m <sup>3</sup>

**Appropriate engineering controls**

**Engineering Controls** Provide adequate ventilation and local exhaust is generally adequate. Eyewash stations. Showers.

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

**Eye/Face Protection** Chemical safety goggles are recommended.

**Skin and Body Protection** Chemical resistant gloves are recommended. Shirts with long sleeves are recommended. Chemical resistant apron is recommended.

**Respiratory Protection** None required if good ventilation is maintained. If TLV is exceeded, use a NIOSH/ MSHA approved respirator.

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

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

<b>Physical State</b>	Liquid	<b>Odor</b>	Very slight
<b>Appearance</b>	Pale amber liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Pale amber		

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>	12-13	
<b>Melting Point/Freezing Point</b>	Not determined	
<b>Boiling Point/Boiling Range</b>	>100 °C / >212 °F	
<b>Flash Point</b>	None	
<b>Evaporation Rate</b>	~1.0	(Water = 1)
<b>Flammability (Solid, Gas)</b>	Liquid-Not applicable	
<b>Upper Flammability Limits</b>	Not determined	
<b>Lower Flammability Limit</b>	Not determined	
<b>Vapor Pressure</b>	Not determined	
<b>Vapor Density</b>	Not determined	
<b>Specific Gravity</b>	1.16	(Water = 1)
<b>Water Solubility</b>	Completely soluble	
<b>Solubility in other solvents</b>	Not determined	
<b>Partition Coefficient</b>	Not determined	
<b>Auto-ignition Temperature</b>	Not determined	
<b>Decomposition Temperature</b>	Not determined	
<b>Kinematic Viscosity</b>	Not determined	
<b>Dynamic Viscosity</b>	Not determined	
<b>Explosive Properties</b>	Not determined	
<b>Oxidizing Properties</b>	Not determined	
<b>VOC Content</b>	None	

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

Not reactive under normal conditions.

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

Under normal conditions of storage and use, hazardous polymerization will not occur.

**Conditions to Avoid**

Keep out of reach of children.

**Incompatible Materials**

Will react vigorously with strong acids and oxidizers. Will react with active metals (aluminum, zinc and magnesium) liberating hydrogen gas.

**Hazardous Decomposition Products**

When strongly heated, as in a fire, this product may produce carbon dioxide, carbon monoxide and sulfur dioxide.

## 11. TOXICOLOGICAL INFORMATION

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

**Eye Contact** Causes severe eye damage.

**Skin Contact** Causes severe skin burns.

**Inhalation** Do not inhale.

**Ingestion** Do not ingest.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Metabisulfite 7681-57-4	= 1131 mg/kg ( Rat )	> 2 g/kg ( Rat )	-
Caustic Soda 1310-73-2	-	= 1350 mg/kg ( Rabbit )	-
Sodium Chloride 7647-14-5	= 3 g/kg ( Rat )	> 10 g/kg ( Rabbit )	> 42 g/m <sup>3</sup> ( Rat ) 1 h
Soda Ash 497-19-8	= 4090 mg/kg ( Rat )	-	-
Sodium Sulfite 7757-83-7	= 820 mg/kg ( Rat )	-	> 5.5 mg/L ( Rat ) 4 h > 22 mg/L ( Rat ) 1 h

**Information on physical, chemical and toxicological effects**

**Symptoms** Please see section 4 of this SDS for symptoms.

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

**Carcinogenicity** Group 3 IARC components are "not classifiable as human carcinogens".

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium Metabisulfite 7681-57-4		Group 3		

**Legend**

**IARC (International Agency for Research on Cancer)**

Group 3 IARC components are "not classifiable as human carcinogens"

**Numerical measures of toxicity**

Not determined.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Not determined.

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Not determined.

**Other Adverse Effects**

Not determined.

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

**California Hazardous Waste Status**

Chemical Name	California Hazardous Waste Status
Caustic Soda 1310-73-2	Toxic Corrosive
Soda Ash 497-19-8	Corrosive

**14. TRANSPORT INFORMATION**

**Note**                                      Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances. Shipping in 6 gallon container under DOT CFR49 173.154 can ship as Consumer Commodity ORM-D until December 31, 2020.

**DOT**

**UN/ID No**                                      UN1824  
**Proper Shipping Name**                  Sodium hydroxide solution  
**Hazard Class**                                8  
**Packing Group**                              II

**IATA**

**UN/ID No**                                      UN1824  
**Proper Shipping Name**                  Sodium hydroxide solution  
**Hazard Class**                                8  
**Packing Group**                              II

**IMDG**

**UN/ID No**                                      UN1824  
**Proper Shipping Name**                  Sodium hydroxide solution  
**Hazard Class**                                8  
**Packing Group**                              II

**15. REGULATORY INFORMATION**

**International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Sodium Metabisulfite	Present	X		Present		Present	X	Present	X	X
Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Caustic Soda	Present	X		Present		Present	X	Present	X	X
Soda Ash	Present	X		Present		Present	X	Present	X	X

**Legend:**

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*
- AICS - Australian Inventory of Chemical Substances*

**US Federal Regulations**

**CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Caustic Soda 1310-73-2	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**CWA (Clean Water Act)**

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Caustic Soda	1000 lb			X

**US State Regulations**

**California Proposition 65**

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium Metabisulfite 7681-57-4	X	X	X
Caustic Soda 1310-73-2	X	X	X

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health Hazards</b> Not determined	<b>Flammability</b> Not determined	<b>Instability</b> Not determined	<b>Special Hazards</b> Not determined
<b><u>HMIS</u></b>	<b>Health Hazards</b> 2	<b>Flammability</b> 0	<b>Physical Hazards</b> 0	<b>Personal Protection</b> N+P

Issue Date: 17-Nov-2014  
 Revision Date: 02-Sep-2015  
 Revision Note: New format

**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 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**