

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **ORCHEM 45**  
Product Use: Caustic low-foam cleaner.  
Company Identification:

US Headquarters  
ORCHEM CORPORATION  
4927 Beech Street  
Cincinnati, Ohio 45212

General Information  
Health/Transportation Emergency-Chem-Tel  
Fax  
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Printing Date: 12/07/2015

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## 2. HAZARDS IDENTIFICATION

### CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Corrosive to metals (Category 1), H290  
Skin corrosion (Category 1A), H314  
Serious eye damage (Category 1), H318  
Specific target organ toxicity - single exposure, respiratory system (Category3), H335  
Acute aquatic toxicity (Category 3), H402

### PICTOGRAM:



**SIGNAL WORD:** DANGER

### HAZARD STATEMENTS – LABEL ELEMENTS

#### Health Hazard Statement(s)

H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H402	Harmful to aquatic life.

#### Physical Hazards Statement(s)

H290	May be corrosive to metals.
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#### Precautionary Statement(s) – Prevention

P260	Do not breathe dust or mist.
P264	Wash skin and contaminated clothing thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves, eye protection, face protection.

#### Precautionary Statement(s) – Response

P301 + P310 + P330 + P331	IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. No NOT induce vomiting.
P303 + P361 + P353 + P363	IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P310 + P351 + P338	IF IN EYES: Immediately call a POISON CENTER or doctor.

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Precautionary Statement(s) – Storage**

P405 Store locked up.

**Precautionary Statement(s) – Disposal**

P501 Dispose of contents/container in accordance with applicable local, regional, national, and/or international regulations.

**Hazards Not Otherwise Classified (HNOC)**

None.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT(S)	CAS#	WEIGHT %
sodium hydroxide	1310-73-2	70-75
sodium carbonate	497-19-8	15-20
sodium metasilicate	6834-92-0	5-10

< 2% of mixture consists of ingredients of unknown toxicity. Exact percentages are withheld as trade secrets.

### 4. FIRST AID MEASURES

**EYE CONTACT:** Get medical attention immediately. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. After 15 minutes check for and remove any contact lenses. Continue to rinse for at least 15 minutes.

**SKIN CONTACT:** Get medical attention immediately. Wash with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 15 minutes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Destroy contaminated shoes.

**INHALATION:** Get medical attention immediately. Remove from exposure and move to fresh air immediately and keep in position comfortable for breathing. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

**INGESTION:** Get medical attention immediately. Do NOT induce vomiting. If victim is conscious and alert, wash out mouth with water then give water. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously keep airway clear.

**NOTES TO PHYSICIAN:** The absence of visible signs or symptoms of burns does NOT reliably exclude the presence of actual tissue damage. Probable mucosal damage may contraindicate the usage of gastric lavage.

### 5. FIRE FIGHTING MEASURES

**GENERAL INFORMATION:** As in any fire, wear a self contained breathing apparatus in pressure-demand, MSHA/NIOSH (Approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion involved in a fire. Use water spray to keep fire exposed container cool.

**EXTINGUISHING MEDIA:** Use media suitable to the cause of the surrounding fire such as, water spray, alcohol resistant foam, dry chemical, or carbon dioxide. Do NOT use straight streams of water.

### 6. ACCIDENTAL RELEASE MEASURES

**In Case Of Spill Or Other Release:** Remove sources of ignition. Ventilate area. Keep unnecessary personnel away. Use appropriate personal protective equipment as indicated in Section 8 of the SDS when risk assessment indicated

this is necessary. Use non-sparking tools and equipment. Absorb with inert material. Sweep or shovel spilled materials in suitable containers. Dispose of in accordance with all local, state, and federal requirements. Do not allow product or residue to enter waterway or any source of drinking water.

## 7. HANDLING AND STORAGE

**Handling:** Use appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. Do not get in eyes or on skin or clothing. Do not breathe dust or mist. Do not ingest. Use only with adequate ventilation. Keep in original container. Do not reuse container. Do not use aluminum fittings or container.

**Storage:** Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool, and well ventilated area, away from incompatible materials (see Section 10) and food and drink. Separate from oxidizing materials and acids. Keep container tightly closed and sealed until ready for use.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower (ANSI Z358.1). Use adequate general or local explosion-proof ventilation (typically 10 air changes per hour) to keep airborne levels to acceptable levels.

COMPONENT	CAS NUMBER	ACGIH TWA	ACGIH STEL	ACGIH CEILING	OSHA FINAL PEL TWA	IDLH
sodium hydroxide	1310-73-2	---	---	C 2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>

### PERSONAL PROTECTIVE EQUIPMENT

**Eyes:** Wear chemical splash goggles that meet the requirements of 29 CFR 1910.133 or European Standard EN 166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure (29 CFR 1910.138 or EN374).

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Appearance:	Granular
Color:	White to Off White
Odor:	None
Boiling Point/Range:	None
Freezing Point/Range:	None
Flash Point:	None
Phosphorous Content as %P:	None
Vapor Pressure:	No Data
Vapor Density (air=1):	No Data
V.O.C.:	None
Specific Gravity (water=1):	~ 1.14
Water Solubility:	100%
pH:	>13@ 4%
Volatility:	No Data
Evaporation Rate:	No Data

## 10. STABILITY AND REACTIVITY

**Stability:** The product is stable.

**Incompatibility with Various Substances:** Reactive or incompatible with the following materials: oxidizing materials, acids, copper, copper alloys, aluminum, nickel, zinc. Carbon monoxide gas may be formed upon contact with reducing sugars, food and beverage products in enclosed spaces.

**Hazardous Polymerization:** Under normal conditions of storage and use, hazardous polymerization will not occur.

**Hazardous Decomposition Products:** Decomposition products may include the following materials: carbon dioxide, carbon monoxide, sodium oxides.

## 11. TOXICOLOGICAL INFORMATION

**TOXICITY:** No Data Available For Product.

**CARCINOGENICITY:**

Product/Ingredient Name	ACGIH	IARC	NTP
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## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL INFORMATION:** No Data Available For Product.

## 13. DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. U.S. EPA guidelines for the classifications are listed in 40 CFR 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classifications.

## 14. TRANSPORTATION INFORMATION

**U.S. DOT Bill of Lading Description:** UN 3262, corrosive solid, basic, inorganic, N.O.S. (Sodium Hydroxide, Sodium Metasilicate), 8, II

## 15. REGULATORY INFORMATION

### INTERNATIONAL INVENTORIES

All components of this product are listed on the following inventories: U.S.A. (TSCA), Canada (DSL).

### U.S. REGULATIONS

**CALIFORNIA PROPOSITION 65:** None of the components of this product are listed.

### STATE RIGHT TO KNOW (RTK)

INGREDIENT(S)	CAS#	MA	NJ	PA	MN
sodium hydroxide	1310-73-2	X	X	X	X
disodium metasilicate	6834-92-0	---	X	X	---

### CERCLA/SARA 302/304

INGREDIENT(S)	CAS#	WEIGHT %	CERCLA/SARA RQ(LBS)	SECTION 302TPQ (LBS)
sodium hydroxide	1310-73-2	70-75	1000	---

### SARA 311/312 Hazard categories

Immediate:	X
Delayed:	---
Fire:	---
Reactivity:	---
Sudden Release Of Pressure:	---

### SARA 313:

ORCHEM 45

None.

**Clean Air Act:**

Not regulated.

**Clean Water Act:**

CAS# 1310-73-2 is listed.

## 16. OTHER INFORMATION

Hazardous Material

Information System (U.S.A.)

Health: 3

Flammability: 0

Physical Hazard: 0

National Fire Protection

Association (U.S.A.)

Health: 3

Flammability: 0

Instability: 0

**HMIS and NFPA use a numbering scale ranging from 0-4 to indicate the degree of hazard. A value of 0 means that the substance possesses essentially no hazard; a rating of 4 indicates high hazard.**

**Date of Creation: 06/10/1996**

**Issue Number: 4.1**

**Date of Revision: 12/07/2015**

**Prepared by:** Compliance Group

The information contained in this Safety Data Sheet is intended to comply with the requirements of 29 CFR 1910.1200. This information is believed to be accurate and based on data available to ORCHEM CORPORATION at this time. It is intended to be used as a guide to the safe handling and use by properly trained individuals. It is the end users responsibility to determine the suitability of the information for their particular purposes. This information is provided without warranty.