



# SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** THUNDER  
**PRODUCT NUMBER:** 9147  
**PRODUCT FAMILY:** ALKALINE DETERGENT  
**MANUFACTURER:** KO MANUFACTURING, INC  
 2720 E. DIVISION STREET  
 SPRINGFIELD, MO 65803  
 417-866-8000  
**INFORMATION USE:** HEAVY DUTY CLEANER

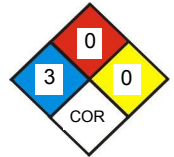
**DATE PREPARED:** 1/2/2020  
**SUPERCEDED DATE:** 8/2/2019

**EMERGENCY CONTACT:**  
 CHEMTREC 800-424-9300

## 2. HAZARD IDENTIFICATION

**DOT HAZARD CLASSIFICATION:** CORROSIVE LIQUID  
**SIGNAL WORD:** DANGER!  
**ROUTE OF EXPOSURE:** EYE CONTACT, SKIN CONTACT, INGESTION AND INHALATION  
**GHS HAZARD CLASSIFICATION:** SKIN CORROSIVE 1B  
 EYE DAMAGE/IRRITATION 1

NFPA



**GHS LABEL ELEMENTS:** H314 - Causes severe skin burns and eye damage.  
 P260 - Do not breathe dust/fume/gas/vapours/spray.  
 P264 - Wash exposed skin thoroughly after handling.  
 P280 - Wear protective gloves/clothing/eye protection/face protection.  
 P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P351 - Rinse cautiously with water for several minutes.  
 P363 - 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+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310 - Immediately call POISON CENTER or doctor/physician.  
 P405 - Store locked up.  
 P501 - Dispose of content/container in accordance with local/national regulations.

PICTOGRAMS



## 3.COMPOSITION IDENTIFICATION

INGREDIENTS:	C.A.S. NUMBER:	PERCENT:
SODIUM HYDROXIDE	1310-73-2	<10.0%
2-BUTOXYETHANOL	111-76-2	<1.0%
ALCOHOL ETHOXYLATES	68439-46-3	<10.0%
POLY ALKYL ETHERS, PHOSPHATE	68130-47-2	<5.0%
SODIUM XYLENESULFONATE	1300-72-7	<5.0%
SODIUM GLUCONATE	527-07-1	<5.0%
TETRASODIUM EDTA	64-02-8	<5.0%
WATER	7732-18-5	Balance

## 4. FIRST AID MEASURES

**EYE CONTACT:** RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO SO. CONTINUE RINSING. CALL A PHYSICIAN IMMEDIATELY.

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#### 4. FIRST AID MEASURES - CONTINUED

**SKIN CONTACT:** WASH EXPOSED SKIN THOROUGHLY AFTER HANDLING. REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER. GET MEDICAL ADVICE/ATTENTION.

**INGESTION:** RINSE MOUTH. DO NOT INDUCE VOMITING. IF CONSCIOUS, GIVE LARGE QUANTITIES OF WATER TO DRINK. CALL A POISON CENTER OR PHYSICIAN IMMEDIATELY.

**INHALATION:** REMOVE VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING. GIVE OXYGEN OR ARTIFICIAL RESPIRATION AS NEEDED. CALL A POISON CENTER OR PHYSICIAN IMMEDIATELY.

#### 5. FIRE FIGHTING MEASURES

**FLAMMABLE PROPERTIES:** NON FLAMMABLE.

**FLASH POINT:** DOES NOT FLASH.

**SUITABLE EXTINGUISHING MEDIA:** DRY CHEMICAL, FOAM OR CARBON DIOXIDE, WATER SPRAY.

**UNSUITABLE EXTINGUISHING MEDIA:** NOT ESTABLISHED.

**SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:** NONE KNOWN.

**PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS:** WEAR SELF-CONTAINED BREATHING APPARATUS (PRESSURE DEMAND MSHA/NIOSH APPROVED) AND FULL PROTECTIVE GEAR.

#### 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** AVOID CONTACT WITH EYES AND SKIN. SPILL AREA MAY BE SLIPPERY. WEAR PROPER PROTECTIVE EQUIPMENT WHEN DEALING WITH RELEASE.

**ENVIRONMENTAL PRECAUTIONS:** CONTAIN SPILL TO AVOID RELEASE TO THE ENVIRONMENT. KEEP CONTAINER TIGHTLY CLOSED.

**METHODS FOR CONTAINMENT AND CLEAN-UP:** DIKE AND CONTAIN SPILL. COLLECT LIQUID WITH AN INERT ABSORBENT AND TRANSFER TO CONTAINER FOR REUSE OR DISPOSAL.

#### 7. HANDLING AND STORAGE

**HANDLING:** HANDLE WITH CARE AND AVOID CONTACT WITH EYES AND SKIN. ALWAYS WEAR PROPER CHEMICAL RESISTANT PROTECTIVE EQUIPMENT 29CFR1910.132-138. WASH THOROUGHLY AFTER HANDLING.

**STORAGE:** AVOID RELEASE TO THE ENVIRONMENT. STORE IN LOCKED STORAGE USING CORROSIVE RESISTANT CONTAINERS. KEEP OUT OF REACH OF CHILDREN.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS:** IF MIST LEVELS ARE HIGH SPECIAL VENTILATION MAY BE REQUIRED.

**EYE / FACE PROTECTION:** CHEMICAL SAFETY GOGGLES AND FULL FACE SHIELD.

**SKIN PROTECTION:** CHEMICAL RESISTANT GLOVES AND IMPERVIOUS APRON AND BOOTS.

**THRESHOLD LIMIT VALUE (TLV):** SODIUM HYDROXIDE, 2 MG/M<sup>3</sup>; 2-BUTOXYETHANOL, 20 PPM

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** LIQUID.

**APPEARANCE:** GREEN LIQUID.

**ODOR:** LEMON SCENT.

**BOILING POINT:** NOT ESTABLISHED.

**FREEZING POINT:** NOT ESTABLISHED.

**SPECIFIC GRAVITY:** 1.14

**pH (1%):** 11.5-12.5

**EVAPORATION RATE:** LESS THAN 1.

**FLASH POINT:** DOES NOT FLASH.

**LOWER FLAMMABILITY/EXPLOSIVE LIMIT:** NOT ESTABLISHED.

**UPPER FLAMMABLE/EXPLOSIVE LIMIT:** NOT ESTABLISHED.

**AUTO-IGNITION TEMPERATURE:** NOT ESTABLISHED.

**VISCOSITY:** NOT ESTABLISHED.

**REALITIVE DENSITY:** 9.5 LBS./GL.

**SOLUBILITY:** SOLUBLE.

**VAPOR PRESSURE:** NOT ESTABLISHED.

**VAPOR DENSITY:** NOT ESTABLISHED.

**DECOMPOSITION TEMPERATURE:** NOT ESTABLISHED.

**PARTICAL COEFFICIENT:** NOT ESTABLISHED.  
N-OCTANOL/WATER

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## 10. STABILITY AND REACTIVITY

**CHEMICAL STABILITY:** STABLE.

**CONDITIONS TO AVOID:** NO UNUSUAL CONDITIONS.

**INCOMPATIBLE MATERIALS:** SOFT METALS AND ACIDIC COMPOUNDS.

**HAZARDOUS DECOMPOSITION PRODUCTS:** CARBON MONOXIDE AND DIOXIDE FROM THERMAL DECOMPOSITION.

## 11. TOXICOLOGICAL INFORMATION

**EYE IRRITATION/CORROSION:** CAN CAUSE SEVERE BURNS TO EYES AND SKIN

**EFFECTS OF SHORT-TERM EXPOSURE:** CAUSES BURNS TO EYES, SKIN AND MOUTH.

**INGESTION:** CAN CAUSE SEVERE BURNS TO MOUTH, THROAT AND STOMACH.

**LD-50:** NOT ESTABLISHED.

**CARCINOGENICITY:** NOT CONSIDERED A CARCINOGEN BY IARC, ACGIH, NTP, OR OSHA

## 12. ECOLOGICAL IDENTIFICATION

**ECOTOXICITY:** NOT ESTABLISHED.

**PERSISTENCE AND DEGRADABILITY:** BIODEGRADABLE.

**BIOACCUMULATION/ACCUMULATION:** NOT ESTABLISHED.

## 13. DISPOSAL CONDITIONS

THIS MATERIAL WHEN DISCARDED IS A HAZARDOUS WASTE DEFINED BY 40CFR261. MATERIALS ARE TO BE DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

## 14. TRANSPORTATION INFORMATION

**GROUND SHIPPING INFORMATION:**

UN1760, CORROSIVE LIQUID, N.O.S., (SODIUM HYDROXIDE), 8, PGII

**WATER SHIPPING INFORMATION:**

UN1760, CORROSIVE LIQUID, N.O.S., (SODIUM HYDROXIDE), 8, PGII

**AIR SHIPPING INFORMATION:**

UN1760, CORROSIVE LIQUID, N.O.S., (SODIUM HYDROXIDE), 8, PGII

## 15. REGULATORY INFORMATION

**US FEDERAL REGULATIONS:**

**TSCA (TOXIC SUBSTANCE CONTROL ACT)** ALL COMPONENTS LISTED ON TSCA INVENTORY.

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):**

**313 REPORTABLE INGREDIENTS**

**CAS NUMBER:**

**PERCENT:**

GLYCOL ETHERS

CATEGORY N230

0.5%

**STATE REGULATIONS:**  CALIFORNIA PROPOSITION 65  
Possible Trace Ethylene Oxide cas# 75-21-8  
Possible Trace 1,4-Dioxane cas# 123-91-1

**INTERNATIONAL REGULATIONS:** CLASS E CORROSIVE UNDER CANADIAN WHMIS

**SECTION 15 NOTES:** NONE.

## 16. OTHER INFORMATION

**PHONE NUMBER:** 417-866-8000

**DATE OF PREPARATION:** 1/2/2020

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