

SAFETY DATA SHEET

TEMPEST NO. 810

Product ID: FP081001

Revised: 03-11-2015

Replaces: 09-11-2013

1. IDENTIFICATION

Product Identifier: TEMPEST NO. 810
CAS Number: MIXTURE
Recommended Use: No data available.
Restrictions on Use: No data available.

Hydrite Chemical Co.
300 N. Patrick Blvd.
Brookfield, WI 53008-0948
(262) 792-1450

EMERGENCY RESPONSE NUMBERS:
24 Hour Emergency #: (414) 277-1311
CHEMTREC Emergency #: (800) 424-9300

2. HAZARD(S) IDENTIFICATION

GHS Classification(s): Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2A

GHS Label Elements:

GHS Hazard Symbols:



Signal Word: Warning
Hazard Statements: Causes skin irritation.
Causes serious eye irritation.

Precautionary Statements:

Prevention: Wash thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF ON SKIN: Wash with plenty of water
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see First Aid on SDS or on this label).
If skin irritation occurs: Get medical advice or attention.
If eye irritation persists: Get medical advice or attention.
Take off contaminated clothing and wash before reuse.

Hazards Not Otherwise Classified: May be harmful or fatal if swallowed and enters airways. Confirmed animal carcinogen with unknown relevance to humans. Potential peroxide former.

Percentage of Components with Unknown Acute Toxicity:

Dermal: 10.3 %
Inhalation Vapor: 10.3 %
Inhalation Dust/Mist: 10.3 %

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances/Mixtures:

| <u>Chemical or Common Name/Synonyms</u> | <u>CAS Number</u> | <u>% by Wt.</u> |
|---|-------------------|-----------------|
|---|-------------------|-----------------|

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| | | |
|------------------------------|------------|--------|
| 2-Butoxyethanol | 111-76-2 | < 15 % |
| Secondary Alcohol Ethoxylate | 84133-50-6 | < 15 % |

Note: Any chemical identity and/or exact percentage not expressly stated is being withheld as a trade secret or is due to batch variation.

4. FIRST-AID MEASURES

Description of Necessary Measures:

Eye Contact: If in eyes: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention. Remove contact lenses after the first 5 minutes and continue flushing.

Skin Contact: If on skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Do not reuse clothing and shoes until cleaned. Wash with soap and water. Discard footwear which cannot be decontaminated.

Inhalation: If inhaled: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

Ingestion: If swallowed: If fully conscious, drink a quart of water. DO NOT induce vomiting. CALL A PHYSICIAN IMMEDIATELY. If unconscious or in convulsions, take immediately to a hospital or a physician. NEVER induce vomiting or give anything by mouth to an unconscious victim. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Most Important Symptoms/Effects, Acute and Delayed:

Eye Contact: May cause severe irritation. Liquid contact may cause: discomfort. pain. redness. corneal injury. Effects may be slow to heal. Vapors may cause: irritation. May cause: blindness. chemical burns.

Skin Contact: May cause moderate irritation. Repeated exposure may cause: blistering. burns. May cause more severe response on covered skin (under clothing, gloves). Brief contact may cause: redness. drying. flaking. pain.

Skin Absorption: May be harmful if absorbed through skin. Prolonged skin contact to animals which are less sensitive to hemolysis, as are humans, did not result in the absorption of harmful amounts.

Inhalation: May cause moderate irritation. Excessive exposure may irritate: nose. throat. upper respiratory tract. Symptoms may include: headache. In animals, effects have been reported on the following organs: blood (hemolysis). secondary effects to the kidney and liver. Human red blood cells have been shown to be significantly less sensitive to hemolysis than those of rodents and rabbits. Excessive exposure may cause: lung injury.

Ingestion: May cause mild to severe irritation. In animals, effects have been reported on the following organs: blood (hemolysis). secondary effects to the kidney and liver. Human red blood cells have been shown to be significantly less sensitive to hemolysis than those of rodents and rabbits. Massive ingestion of ethylene glycol monobutyl ether (attempted suicides) may produce metabolic acidosis and subsequent secondary effects such as hemolysis, central nervous system and kidney effects.

Indication of Immediate Medical Attention and Special Treatment Needed: Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. Maintain adequate ventilation and oxygenation of the patient. Repeated excessive exposure may aggravate preexisting blood disease (anemia).

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Water spray. Water fog. Dry chemical. Carbon dioxide. Alcohol resistant foam.

Specific Hazards Arising from the Chemical:

Fire and Explosion Hazards: Material will not ignite or burn. Container may rupture from gas generation in a fire situation.

Hazardous Combustion Products: Carbon dioxide. Carbon monoxide. Original material. Irritating and/or toxic gases.

Special Protective Equipment and Precautions for Fire-Fighters: Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers and disperse vapors. Move containers from fire area if possible without hazard. Run-off from fire control may cause pollution. CAUTION: Spilled material may be slippery.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, Emergency Procedures: Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8.

Methods and Materials for Containment and Clean Up: Shut off source of leak if safe to do so. Contain spill, place into drums for proper disposal. Soak up residue with non-flammable absorbent material. Place in non-leaking containers for immediate disposal. Flush remaining area with water to remove trace residue and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs. CAUTION: Spilled material may be slippery.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. Empty containers retain product residue (vapor, dust, or liquid) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other source of ignition. They may explode and cause injury or death. Do not distill to near dryness.

Conditions for Safe Storage, Including any Incompatibilities: Store in a cool, dry place. Keep away from incompatible materials. Minimize exposure to air. Periodically test for peroxide formation on long-term storage. If peroxide formation is suspected, do not open or move container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA Exposure Guidelines:

| <u>Component</u> | <u>Limits</u> |
|------------------|---|
| 2-Butoxyethanol | 50 ppm TWA; 240 mg/m ³ TWA; (Skin) |

ACGIH Exposure Guidelines:

| <u>Component</u> | <u>Limits</u> |
|------------------|---------------|
| 2-Butoxyethanol | 20 ppm TWA |

Engineering Controls: General room ventilation is required. Local exhaust ventilation, process enclosures or other engineering controls may be needed to maintain airborne levels below recommended exposure limits. Maintain adequate ventilation. Do not use in closed or confined spaces. Avoid creating dust or mist. Use explosion-proof ventilation equipment. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly.

Individual Protection Measures:

Eye/Face Protection: Wear chemical safety goggles and a full face shield while handling this product. Wear a full-face respirator, if needed.

Skin Protection: Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Butyl rubber. Chemical-resistant.

Respiratory Protection: Respiratory protection must be worn if ventilation does not eliminate symptoms or keep levels below recommended exposure limits. If exposure limits are exceeded, wear: NIOSH-Approved air-purifying respirator with: Organic vapor cartridge. NIOSH-Approved Supplied Air Respirator (SAR). NIOSH-

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Approved self-contained breathing apparatus. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

Other Protective Equipment: Eye-wash station. Safety shower. Rubber apron. Chemical safety shoes. Rubber boots. Protective clothing. Full body suit. Launder contaminated clothing and clean protective equipment before reuse.

General Hygiene Conditions: Wash with soap and water before meal times and at the end of each work shift. Food, beverages, and tobacco products should not be carried, stored or consumed where this material is in use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.
Color: Clear. Blue.
Odor: No data available.
Odor Threshold: N.D.
pH: 11.6 (as is)
Freezing Point (deg. F): N.D.
Melting Point (deg. F): N.D.
Initial Boiling Point or Boiling Range: N.D.
Flash Point: N.A.
Flash Point Method: N.A.
Evaporation Rate (nBuAc = 1): N.D.
Flammability (solid, gas): N.D.
Lower Explosion Limit: N.D.
Upper Explosion Limit: N.D.
Vapor Pressure (mm Hg): N.D.
Vapor Density (air=1): N.D.
Specific Gravity or Relative Density: 1.013 @ 25 Deg. C
Solubility in Water: Appreciable
Partition Coefficient (n-octanol/water): N.D.
Autoignition Temperature: No Data
Decomposition Temperature: N.D.
Viscosity: N.D.
% Volatile (wt%): N.D.
VOC (wt%): N.D.
VOC (lbs/gal): N.D.
Fire Point: N.D.

10. STABILITY AND REACTIVITY

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur under normal conditions.

Conditions to Avoid: Avoid excess exposure to air. Do not distill to dryness. Product can oxidize at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

Incompatible Materials: Strong oxidizing agents. Acids. Halogenated compounds. Strong bases. Strong acids.

Hazardous Decomposition Products: Aldehydes. Ketones. Organic acids. Carbon oxides. Carbon monoxide. Carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Routes of Exposure: Eyes. Skin. Ingestion. Inhalation. Absorption.

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Symptoms/Effects: Acute, Delayed and Chronic:

Eye Contact: May cause severe irritation. Liquid contact may cause: discomfort, pain, redness, corneal injury. Effects may be slow to heal. Vapors may cause: irritation. May cause: blindness, chemical burns.

Skin Contact: May cause moderate irritation. Repeated exposure may cause: blistering, burns. May cause more severe response on covered skin (under clothing, gloves). Brief contact may cause: redness, drying, flaking, pain.

Skin Absorption: May be harmful if absorbed through skin. Prolonged skin contact to animals which are less sensitive to hemolysis, as are humans, did not result in the absorption of harmful amounts.

Inhalation: May cause moderate irritation. Excessive exposure may irritate: nose, throat, upper respiratory tract. Symptoms may include: headache. In animals, effects have been reported on the following organs: blood (hemolysis), secondary effects to the kidney and liver. Human red blood cells have been shown to be significantly less sensitive to hemolysis than those of rodents and rabbits. Excessive exposure may cause: lung injury.

Ingestion: May cause mild to severe irritation. In animals, effects have been reported on the following organs: blood (hemolysis), secondary effects to the kidney and liver. Human red blood cells have been shown to be significantly less sensitive to hemolysis than those of rodents and rabbits. Massive ingestion of ethylene glycol monobutyl ether (attempted suicides) may produce metabolic acidosis and subsequent secondary effects such as hemolysis, central nervous system and kidney effects.

Numerical Measures of Toxicity:

| <u>Component</u> | <u>Oral LD50</u> | <u>Dermal LD50</u> | <u>Inhalation LC50</u> |
|---------------------------------|------------------|--------------------|------------------------|
| 2-Butoxyethanol | Rat: 470 mg/kg | Rabbit: 220 mg/kg | 4H Rat: 2.2 mg/L |
| Secondary Alcohol Ethoxylate | Rat: 2100 mg/kg | No Data | No Data |

Acute Toxicity Estimate (ATE):

| | |
|------------------------------|--------------|
| Oral: | 5529 mg/kg |
| Dermal: | 2322 mg/kg |
| Inhalation Vapor: | 23.2164 mg/L |
| Inhalation Dust/Mist: | 23.2164 mg/L |

Cancer Information:

This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

Medical Conditions Aggravated by Exposure to Product: Dermatitis.

Other: Repeated Dose Toxicity: In animals, effects have been reported on the following organs: blood (hemolysis) and secondary effects on the kidney and liver. Human red blood cells have been shown to be significantly less sensitive to hemolysis than those of rodents and rabbits. ACGIH lists 2-Butoxyethanol as an A3 - Confirmed animal carcinogen with unknown relevance to humans. In long-term animal studies with ethylene glycol butyl ether, small but statistically significant increases in tumors were observed in mice but not rats. The effects are not believed to be relevant to humans. If the material is handled in accordance with proper industrial handling procedures, exposures should not pose a carcinogenic risk to man.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: No data available.

Chemical Fate Information: No data available.

13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number: N.A.

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Disposal Method: Dispose of in accordance with all local, state and federal regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. Since emptied containers retain product residue, follow label warnings even after container is emptied. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition. Do NOT dump into any sewers, on the ground, or into any body of water. The information offered here is for the product as shipped. Use and/or alteration to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

14. TRANSPORT INFORMATION

DOT (Department of Transportation):

Proper Shipping Name: Not regulated by the DOT.

15. REGULATORY INFORMATION

TSCA Inventory Status: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

SARA Title III Section 311/312 Category Hazards:

| <u>Immediate (Acute)</u> | <u>Delayed (Chronic)</u> | <u>Fire Hazard</u> | <u>Pressure Release</u> | <u>Reactive</u> |
|--------------------------|--------------------------|--------------------|-------------------------|-----------------|
| Yes | Yes | No | No | No |

| <u>Regulated Components:</u> | <u>CAS</u> | <u>CERCLA</u> | <u>SARA</u> | <u>SARA</u> | <u>U.S.</u> | <u>WI</u> | <u>Prop</u> |
|------------------------------|---------------|---------------|-------------|-------------|-------------|------------|-------------|
| <u>Component</u> | <u>Number</u> | <u>RQ</u> | <u>EHS</u> | <u>313</u> | <u>HAP</u> | <u>HAP</u> | <u>65</u> |
| 2-Butoxyethanol | 111-76-2 | No | No | Yes | No | Yes | No |

***Prop 65 - May Contain the Following Trace Components:**

This product may contain a detectable level of (a) chemical(s) subject to California proposition 65.

16. OTHER INFORMATION

Hazard Rating System

Health: 2*

Flammability: 0

Reactivity: 0

* = Chronic Health Hazard

NFPA Rating System

Health: 2

Flammability: 0

Reactivity: 0

Special Hazard: None

SDS Abbreviations

N.A. = Not Applicable

N.D. = Not Determined

HAP = Hazardous Air Pollutant

VOC = Volatile Organic Compound

C = Ceiling Limit

N.E./Not Estab. = Not Established

SDS Prepared by: JAK

Reason for Revision: Product formulation change.

Revised: 03-11-2015

Replaces: 09-11-2013