SAFETY DATA SHEET

GREASE-X NO. 367
Product ID: FP0367
Revised: 06-08-2023
Replaces: 03-10-2015

1. IDENTIFICATION

Product Identifier Used on the Label:	GREASE-X NO. 367
Other Identifiers:	N.A.
Product ID:	Mixture
Recommended Use:	No data available.
Restrictions on Use:	No data available.

Hydrite Chemical Co.
17385 Golf Parkway
Brookfield, WI 53045
(262) 792-1450

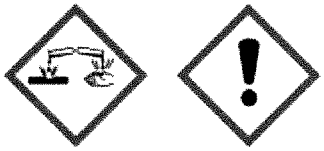
EMERGENCY RESPONSE NUMBERS:
24 Hour Emergency #: (414) 277-1311
CHEMTREC Emergency #: (800) 424-9300

2. HAZARD(S) IDENTIFICATION

GHS Classification(s): Substance or mixture corrosive to metals Category 1
Skin Corrosion/Irritation Category 1B
Serious Eye Damage/Eye Irritation Category 1
Acute Toxicity - Inhalation Vapour Category 4

GHS Label Elements:

GHS Hazard Symbols:



Signal Word: Danger

Hazard Statements:
May be corrosive to metals.
Causes severe skin burns and eye damage.
Harmful if inhaled.

Precautionary Statements:

Prevention:
Keep only in original container.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.

Response:
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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.
Specific treatment (see First Aid on SDS or on this label).

Wash contaminated clothing before reuse.
Absorb spillage to prevent material damage.

Storage: Store in a secure manner.
Store in corrosive resistant container with a resistant inner liner.

Disposal: Dispose of in accordance with local, regional and international regulations.

Hazards not otherwise classified: May react with various food sugars to form carbon monoxide. Reacts with most metals to form explosive/flammable hydrogen gas. May react violently with water. Reacts vigorously or violently with many organic and inorganic chemicals such as: acids, acrolein, acrylonitrile, chlorinated hydrocarbons (e.g. 1,2dichloroethylene), chlorine dioxide, maleic anhydride, nitroethane, nitroparaffins, 2-nitrophenol, nitropropane, phosphorus, potassium persulfate, and tetrahydrofuran (containing peroxides).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances/Mixtures:

Chemical or Common Name/Synonyms	CAS Number	% by Wt.
Diethylene Glycol Monobutyl Ether	112-34-5	< 15 %
Sodium Xylene Sulfonate	1300-72-7	< 10 %
Potassium Hydroxide	1310-58-3	< 5 %
Secondary Alcohol Ethoxylate	84133-50-6	< 5 %
Potassium Silicate	1312-76-1	< 3 %

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 lens if easy to do. Continue flushing eye for at least 15 minutes. Washing eyes within several seconds is essential to achieve maximum effectiveness. 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 contaminated leather articles such as shoes and belt. If skin feels slippery, caustic may still be present in sufficient quantities to cause rash or burn. Continue washing skin until slick feeling is gone. 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: CORROSIVE-Causes severe irritation and burns. May cause: corneal damage. impaired vision. eye damage. permanent eye damage. blindness.

Skin Contact: CORROSIVE-Causes severe irritation and burns. Contact may cause: redness. swelling. dermatitis (inflammation of the skin). scab formation. ulceration. permanent skin damage. Effects from chronic skin exposure would be similar to those from single exposure and may include effects secondary to tissue destruction. Brief contact may cause: moderate irritation. drying. flaking.

Skin Absorption: Material can penetrate to deeper layers of skin and corrosion will continue until removed. The severity of injury depends on the concentration and duration of exposure.

Inhalation: CORROSIVE-Causes severe irritation and burns. Inhalation of high concentrations may cause: drowsiness. dizziness. May irritate or damage: nose. mouth. throat. lungs. respiratory tract. May cause: shortness of breath. wheezing. coughing. sneezing. choking. chest pain.

Ingestion: CORROSIVE-Causes severe irritation and burns. Swallowing large amounts may cause injury. Due to its light viscosity, there is a danger of aspiration into the lungs during vomiting. May cause damage to the: mouth. throat. stomach. gastrointestinal tract. May cause: nausea. diarrhea. vomiting (bloody). abdominal pain. bleeding. ulcerations. severe gastrointestinal damage. perforation of the intestinal tract. death. Blood loss through damaged tissue can lead to low blood pressure and shock. Effects from chronic exposure would be similiar to those from single exposure and may include effects secondary to tissue destruction.

Indication of Immediate Medical Attention and Special Treatment Needed: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Medical observation and assessment is recommended for all ingestions, all eye exposures, and symptomatic inhalation and dermal exposures. If medical observation is required, monitor for a minimum of 4 hours for the onset or worsening of symptoms. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. For prolonged exposures and significant exposures, consider delayed injury to exposed tissues. For symptomatic ingestion, do not administer oral fluids and consider investigation by endoscopy, X-ray, or CT scan. Suggest endotracheal/esophageal control if lavage is done. Esophageal perforation, airway compromise, hypotension, and shock are possible. If burn is present, treat as any thermal burn, after decontamination. Excessive exposure may aggravate preexisting asthma and other respiratory disorders (e.g. emphysema, bronchitis, reactive airways dysfunction syndrome). Bronchodilators, expectorants, antitussives and corticosteroids may be of help. Respiratory symptoms, including pulmonary edema, may be delayed. Maintain adequate ventilation and oxygenation of the patient. Eye irrigation may be necessary for an extended period of time to remove as much potassium hydroxide as possible. Duration of irrigation and treatment is at the discretion of medical personnel. If burn is present, treat as any thermal burn, after decontamination. Due to irritant properties, swallowing may result in burns/ulceration of mouth, stomach and lower gastrointestinal tract with subsequent stricture. Aspiration of vomitus may cause lung injury.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Water spray. Dry chemical. Carbon dioxide. Alcohol foam. Foam. DO NOT USE: Direct water stream.

Specific Hazards Arising from the Chemical:

Fire and Explosion Hazards: Product may react with some metals (ex.: Aluminum, Zinc, Tin, etc.) to release flammable hydrogen gas. Container may rupture from gas generation in a fire situation. Forms peroxides of unknown stability. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition, which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide. Carbon oxides. Sulfur oxides. Corrosive vapors. Toxic fumes. 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. If container is not properly cooled, it can rupture in the heat of a fire. Move containers from fire area if possible without hazard. Run-off from fire control may cause pollution. Use water spray to cool fire-exposed containers,

but avoid getting water into containers. Do not use direct water stream. May spread fire. Burning liquids may be extinguished by dilution with water. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. CAUTION: Spilled material may be slippery.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, Emergency Procedures: Eliminate all sources of ignition. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit.

Methods and Materials for Containment and Clean Up: 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. CAUTION: This product may react violently with acids and water. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs. Do not use water for cleanup.

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. When mixing, slowly add to water to minimize heat generation and spattering. Do not add large quantities of water, excessive heat formation will cause boiling and spattering.

Conditions for Safe Storage, Including any Incompatibilities: CORROSIVE MATERIAL. Store in a cool, well ventilated area, out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Keep away from all sources of ignition. Minimize exposure to air. Do not distill to near dryness. If peroxide formation is suspected, do not open or move container. Do not store in aluminum container or use aluminum fittings or transfer lines. Highly corrosive to most metals with evolution of hydrogen gas. Never enter a pit or tank without following safety procedures-never alone, always with a lifeline and positive pressure supplied air. Contact of caustic potash cleaning solutions with food and beverage products (in enclosed vessels or spaces) can produce lethal concentrations of carbon monoxide gas.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA Exposure Guidelines:

Component	Limits
No components found.	

ACGIH Exposure Guidelines:

Component	Limits
Diethylene Glycol Monobutyl Ether	10 ppm TWA (inhalable fraction and vapor)
Potassium Hydroxide	2 mg/m3 Ceiling

Note:

* Exposure limit for Polyethylene glycol: 10 mg/m3 TWA WEEL (Particulate).

Appropriate Engineering Controls: General room ventilation and local exhaust are required. Local exhaust ventilation, process enclosures or other engineering controls may be needed to maintain airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment. Avoid creating dust or mist. Maintain adequate ventilation. Do not use in closed or confined spaces. 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. Chemical-resistant. Rubber. Neoprene.

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: 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. Protective clothing. Full chemical suit. Rubber apron. Rubber boots. Full body suit.

General Hygiene Conditions: Wash with soap and water before meal times and at the end of each work shift.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.
Color: Clear. Light yellow.
Odor: Mild odor.
Odor Threshold: N.D.
pH: > 12 (as is)
Freezing Point (deg. F): N.D.
Melting Point (deg. F): N.D.
Initial Boiling Point or Boiling Range: N.D.
Flash Point: NONE.
Flash Point Method: N.A.
Evaporation Rate (nBuAc = 1): N.D.
Flammability (solid, gas): N.D.
Lower Explosion Limit: N.A.
Upper Explosion Limit: N.A.
Vapor Pressure (mm Hg): N.D.
Vapor Density (air=1): N.D.
Specific Gravity or Relative Density: 1.075 @ 25 °C
Solubility in Water: Complete
Partition Coefficient (n-octanol/water): N.D.
Auto-ignition Temperature: No Data
Decomposition Temperature: N.D.
Viscosity: N.D.
% Volatile (wt%): N.D.
VOC (wt%): ~10
VOC (lbs/gal): ~0.9
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. Produces Chloroacetylene with chlorinated alkenes and heat. Reactions with various food sugars may form carbon monoxide. May react with ammonium salts resulting in evolution of ammonia gas. Flammable hydrogen gas may be produced on contact with aluminum, tin, lead, and zinc.

Conditions to Avoid (e.g., static discharge, shock, or vibration): Product can oxidize at elevated temperatures. Forms peroxides of unknown stability. Avoid excess exposure to air. Do not distill to dryness. Generation of gas during decomposition can cause pressure in closed systems. Contact with water may cause violent reaction with evolution of heat. To dilute: Add product slowly to lukewarm water; not water to product. Contact with acid or incompatible materials may cause a violent reaction with evolution of heat. Product may

react with some metals (ex.: Aluminum, Zinc, Tin, etc.) to release flammable hydrogen gas. Corrosive to steels at elevated temperatures. Contact of caustic potash cleaning solutions with food and beverage products (in enclosed vessels or spaces) can produce lethal concentrations of carbon monoxide gas. Product can decompose at elevated temperatures.

Incompatible Materials: Strong bases. Strong oxidizing agents. Strong acids. Acids. Acrolein. Acrylonitrile. Chlorinated hydrocarbons. Chlorine dioxide. Maleic anhydride. Nitroethane. Nitroparaffins. 2-Nitrophenol. Nitropropane. Phosphorus. Potassium persulfate. Tetrahydrofuran. Organic nitro compounds. Explosives. Organic peroxides. Halogenated compounds. Chlorinated alkenes. Carbohydrates. Metals such as aluminum, zinc, tin, etc. Brass. Bronze. Oxidizing agents. Flammable liquids. Copper. Lead. Other alkali sensitive metals or alloys. Acetaldehyde. Can attack some forms of plastics. Sodium borohydride.

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

11. TOXICOLOGICAL INFORMATION

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

Symptoms/Effects: Acute, Delayed and Chronic:

Eye Contact: CORROSIVE-Causes severe irritation and burns. May cause: corneal damage. impaired vision. eye damage. permanent eye damage. blindness.

Skin Contact: CORROSIVE-Causes severe irritation and burns. Contact may cause: redness. swelling. dermatitis (inflammation of the skin). scab formation. ulceration. permanent skin damage. Effects from chronic skin exposure would be similar to those from single exposure and may include effects secondary to tissue destruction. Brief contact may cause: moderate irritation. drying. flaking.

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Inhalation: CORROSIVE-Causes severe irritation and burns. Inhalation of high concentrations may cause: drowsiness. dizziness. May irritate or damage: nose. mouth. throat. lungs. respiratory tract. May cause: shortness of breath. wheezing. coughing. sneezing. choking. chest pain.

Ingestion: CORROSIVE-Causes severe irritation and burns. Swallowing large amounts may cause injury. Due to its light viscosity, there is a danger of aspiration into the lungs during vomiting. May cause damage to the: mouth. throat. stomach. gastrointestinal tract. May cause: nausea. diarrhea. vomiting (bloody). abdominal pain. bleeding. ulcerations. severe gastrointestinal damage. perforation of the intestinal tract. death. Blood loss through damaged tissue can lead to low blood pressure and shock. Effects from chronic exposure would be similiar to those from single exposure and may include effects secondary to tissue destruction.

Numerical Measures of Toxicity:

Component	Oral LD50	Dermal LD50	Inhalation LC50
Diethylene Glycol Monobutyl Ether	Rat: 5660 mg/kg	Rabbit: 2700 mg/kg	LC50-2H Rat: > 29 ppm
Sodium Xylene Sulfonate	Rat: 1000 mg/kg	Rabbit: > 2000 mg/kg	No Data
Potassium Hydroxide	Rat: 284 mg/kg	No Data	No Data
Secondary Alcohol Ethoxylate	Rat: 2100 mg/kg	No Data	No Data
Potassium Silicate	Rat: 5700 mg/kg	Rat: > 5000 mg/kg	4H Rat: > 2.1 mg/L

Acute Toxicity Estimates (ATE):

Oral:	5136 mg/kg
Inhalation Vapor:	19.0929 mg/L
Inhalation Dust/Mist:	19.0929 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: Asthma. Respiratory system disorders. Eye disorders. Cardiovascular disorders. Dermatitis.

Other: This material will affect all tissues with which it comes into contact. The severity of the tissue damage is a function of concentration, the length of tissue contact time, and local tissue conditions. After exposure, there may be a time delay before irritation and other effects occur.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: No data available.

Chemical Fate Information: No data available.

13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number: D002

Disposal Method: Dispose of in a permitted hazardous waste management facility following all local, state and federal regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. Do NOT dump into any sewers, on the ground, or into any body of water. Disposal methods identified are for the product as sold. For proper disposal of used material, an assessment must be completed to determine the proper and permissible waste management options permitted under applicable rules, regulations and/or laws governing your location.

14. TRANSPORTATION INFORMATION

DOT (Department of Transportation):

Identification Number:	UN3266
Proper Shipping Name:	Corrosive Liquid, Basic, Inorganic, N.O.S. (Contains Potassium Hydroxide)
Hazard class:	8
Packing Group:	II
Reportable Quantity (RQ):	1000# (Potassium Hydroxide)

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: Please see Section 2 of this SDS.

Regulated Components:	CAS	CERCLA	SARA	SARA	U.S.	WI	Prop
Component	**Number**	**RQ**	**EHS**	**313**	**HAP**	**HAP**	**65**
Diethylene Glycol Monobutyl Ether	112-34-5	No	No	Yes	Yes	No	No
Potassium Hydroxide	1310-58-3	Yes	No	No	No	Yes	No

16. OTHER INFORMATION

Hazard Rating System
Health: 3*
Flammability: 0
Reactivity: 0
* = Chronic Health Hazard

NFPA Rating System
Health: 3

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: AF

Reason for Revision: Changes made throughout the SDS.

Revised: 06-08-2023
Replaces: 03-10-2015