

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 2015/830 and US OSHA HCS 2015

Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

- 1.1 Product Code:** T8EG
Product Name: T8E-G Light Grease
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant identified uses: High Temperature Anti-seize
- 1.3 Details of the Supplier of the Safety Data Sheet:**
Company Name: TIODIZE CO, INC.
5858 ENGINEER DRIVE
HUNTINGTON BEACH, CA 92649 United States of America
Web site address: tiodize.com
Email address: tiodize@tiodize.com
Information: 1-813-248-0585 International
- 1.4 Emergency telephone number:**
Emergency Contact: 1-800-255-3924 (U.S. & Canada)
112-808-250-143 (Portugal)

Section 2. Hazards Identification

- 2.1 Classification of the Substance or Mixture:**
Acute Toxicity: Oral, Category 4
Serious Eye Damage/Eye Irritation, Category 2
Skin Sensitization, Category 1
Toxic To Reproduction, Category 1B
Specific Target Organ Toxicity (single exposure), Category 1
Specific Target Organ Toxicity (repeated exposure), Category 1
Aquatic Toxicity (Acute), Category 2
Aquatic Toxicity (Chronic), Category 2

2.2 Label Elements:



GHS Signal Word: Danger

GHS Hazard Phrases:

H302 - Harmful if swallowed.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H360 - May damage fertility or the unborn child .

H370 - Causes damage to organs - Nervous system.

H372 - Causes damage to organs - Nervous system, Bones. through prolonged or repeated exposure.

H401 - Toxic to aquatic life.

H411 - Toxic to aquatic life with long lasting effects.

GHS Precautionary Phrases:

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.



SAFETY DATA SHEET

T8E-G Light Grease

P272 - Contaminated work clothing should not be allowed out of the workplace.
 P273 - Avoid release to the environment.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P281 - Use personal protective equipment as required.

GHS Response Phrases:

P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 P302+352 - IF ON SKIN: Wash with plenty of soap and water.
 P307+311 - IF exposed: Call a POISON CENTER or doctor/physician.
 P308+313 - IF exposed or concerned: Get medical attention/advice.
 P314 - Get medical attention/advice if you feel unwell.
 P330 - Rinse mouth.
 P333+313 - If skin irritation or rash occurs, seek medical advice/attention.
 P337+313 - If eye irritation persists, get medical advice/attention.
 P363 - Wash contaminated clothing before reuse.
 P391 - Collect spillage.

GHS Storage and Disposal Phrases:

P405 - Store locked up.
 P501 - Dispose of contents/container to ...

2.3 Adverse Human Health No data available.

Effects and Symptoms:

Section 3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
1330-78-5	Tritolyl phosphate (MIL-PRF-7808L OIL) 01-2119531335-46	0.55 -3.75 %	215-548-8 NA	Toxic Repro. 1B: H360 STOT (SE) 1: H370 STOT (RE) 1: H372 STOT (RE) 2: H373 Aquatic (A) 1: H400
90-30-2	N-Phenyl-1-naphthylamine (MIL-PRF-7808L OIL) 01-2119488704-27	0.55 -3.75 %	201-983-0 NA	Acute Tox.(O) 4: H302 Skin Sens. 1: H317 Aquatic (A) 1: H400 Aquatic (C) 1: H410
88-27-7	Phenol,4-(dimethylamino)methyl-2,6-bis(1,1-dimethylethyl)- (MIL-PRF-7808L OIL) 01-2119975433-32	0.055 -0.75 %	201-816-1 NA	Acute Tox.(O) 4: H302
7787-32-8	Barium fluoride	1.0 -4.5 %	232-108-0 NA	Acute Tox.(O) 3: H301 Eye Damage 2A: H319 Eye Damage 2B: H320 Toxic Repro. 2: H361 STOT (SE) 3: H335 H336 STOT (RE) 1: H372

Section 4. First Aid Measures

- 4.1 Description of First Aid:** Check the vital functions. Unconscious: maintain adequate airway and respiration.
- Measures:** Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with labored breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give alcohol to drink.
- In Case of Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
- In Case of Skin Contact:** Wash with soap and water. Get medical attention if irritation develops or persists.
- In Case of Eye Contact:** Flush eye with water for 15 minutes. Get medical attention.
- In Case of Ingestion:** If swallowed, do not induce vomiting unless directed by medical personnel, keep warm, quiet and get medical attention.

Section 5. Fire Fighting Measures

- 5.1 Suitable Extinguishing Media:** Dry chemical, CO2, water spray or regular foam.
- Unsuitable Extinguishing Media:** Water jet.
- 5.2 Flammable Properties and Hazards:** No data available.
- Flash Pt:** No data available.
- Explosive Limits:** 265.00 C Method Used: Cleveland Open Cup
 LEL: No data. UEL: No data.
- Autoignition Pt:** No data.
- 5.3 Fire Fighting Instructions:** Cool containers exposed to flames with water until after fire is out.

Section 6. Accidental Release Measures

- 6.1 Protective Precautions, Protective Equipment and Emergency Procedures:** Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
- 6.2 Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Prevent discharge into surface water, sewer or the ground.
- 6.3 Methods and Material For Containment and Cleaning Up:** Keep unnecessary personnel away. Remove all sources of ignition. Local authorities should be advised if significant spillages cannot be contained. Wear appropriate protective equipment
 And clothing during clean-up. Do not touch damaged containers or spilled material unless
 Wearing appropriate protective clothing.

Section 7. Handling and Storage

- 7.1 Precautions To Be Taken in Handling:** Avoid contact with skin and clothing. Avoid contact with eyes. Use only with adequate ventilation. Avoid breathing vapor or mist. Wash hands after handling and before eating or smoking. Shower after work and wash contaminated clothing promptly.
- 7.2 Precautions To Be Taken in Storing:** Keep containers tightly closed. Keep containers in a cool, well-ventilated area. Empty containers may contain harmful, flammable/combustible residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
7787-32-8	Barium fluoride	ACGIH TLV	TWA: 2.5 mg/m3	
		Europe	TWA: 0.5 mg/m3	
		France VL	TWA: 0.5 mg/m3	
		OSHA PELs	TWA: 2.5 mg/m3	
		Britain EH40	TWA: 0.5 mg/m3	

8.2 Exposure Controls:

- 8.2.1 Engineering Controls (Ventilation etc.):** If handled with open container, provide adequate ventilation/exhaust. Do not breathe gas/fumes/vapors/spray.
- 8.2.2 Personal protection equipment:**
- Eye Protection:** Goggles.
- Protective Gloves:** Rubber gloves.
- Other Protective Clothing:** Safety shower and eye-wash fountain in manufacturing areas. Personal protective clothing and use of equipment must be in accordance with 29CFR 1910.132 and 29CFR 1910.133.
- Respiratory Equipment (Specify Type):** A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
- Work/Hygienic/Maintenance Practices:** Do not smoke, eat or drink while using this product. Wash hands with soap and water before smoking, eating, drinking or using toilet facilities. Launder contaminated clothing before reuse.
No data available.

Section 9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical States: [] Gas [X] Liquid [] Solid

Appearance and Odor: Appearance: Dark grey to Black. Grease/Paste.
 Odor: Slight.

pH: No data.

Melting Point: No data.

Boiling Point: No data.

Flash Pt: 265.00 C Method Used: Cleveland Open Cup

Evaporation Rate: No data.

Flammability (solid, gas): No data available.

Explosive Limits: LEL: No data. UEL: No data.

Vapor Pressure (vs. Air or mm Hg): No data.

Vapor Density (vs. Air = 1): No data.

Specific Gravity (Water = 1): 1.14

Solubility in Water: No data.

Octanol/Water Partition Coefficient: No data.

Autoignition Pt: No data.

Decomposition Temperature: No data.

Viscosity: No data.

9.2 Other Information

Percent Volatile: No data.

Section 10. Stability and Reactivity

10.1 Reactivity: Oxidizing materials, Acids and alkalis.

10.2 Stability: Unstable [] Stable [X]

10.3 Conditions To Avoid - Hazardous Reactions: No data available.

Possibility of Hazardous Reactions: Will occur [] Will not occur [X]

10.4 Conditions To Avoid - Instability: Sources of ignition such as sparks, hot spots, welding, flames, and cigarettes.

10.5 Incompatibility - Materials To Avoid: Acidic conditions. Oxidizing materials.

10.6 Hazardous Decomposition or Byproducts: Barium, Tellurium, Fluorine, Hydrogen Fluoride, Carbon Monoxide, Boron Oxides, Barium Oxides, Nitrogen Oxides and Phosphorous Oxide.



Section 11. Toxicological Information

- 11.1 Information on Toxicological Effects:** No data available.
- Irritation or Corrosion:** Can be irritating to skin but not corrosive.
- Carcinogenicity:** NTP? No IARC Monographs? No OSHA Regulated? No

Section 12. Ecological Information

- 12.1 Toxicity:** CAS# 1330-78-5: LC50, Bluegill (*Lepomis macrochirus*), 7000000. UG/L, 96 H, Mortality, Water temperature: 23.00 C C, pH: 7.90, Hardness: 55.00 MG/L; The Acute Toxicity of 47 Industrial Chemicals to Fresh and Saltwater Fishes, Dawson, G.W., A.L. Jennings, D. Drozdowski, and E. Rider, 1977
LC50, Water Flea (*Daphnia magna*), 320.0 - 1000. UG/L, 3 W, Mortality, Water temperature: 19.00 C C, pH: 8.20, Hardness: 209.43 MG/L; Research for a Useful Combination of Test Methods to Determine the Aquatic Toxicity of Environmentally Dangerous Chemicals (Consecutive System of, Adema, D.M.M., J.H. Canton, W. Slooff, and A.O. Hanstveit, 1981
LC50, Guppy (*Poecilia reticulata*), 8000. UG/L, 48 H, Mortality, Water temperature: 23.00 C C, pH: 8.20, Hardness: 209.43 MG/L; Research for a Useful Combination of Test Methods to Determine the Aquatic Toxicity of Environmentally Dangerous Chemicals (Consecutive System of, Adema, D.M.M., J.H. Canton, W. Slooff, and A.O. Hanstveit, 1981
LC50, Inland Silverside (*Menidia beryllina*), 8700000. UG/L, 96 H, Mortality, Water temperature: 20.00 C C, pH: 7.90, Hardness: 55.00 MG/L; The Acute Toxicity of 47 Industrial Chemicals to Fresh and Saltwater Fishes, Dawson, G.W., A.L. Jennings, D. Drozdowski, and E. Rider, 1977
- 12.2 Persistence and Degradability:** No data available.
- 12.3 Bioaccumulative Potential:** No data available.
- 12.4 Mobility in Soil:** No data available.
- 12.5 Results of PBT and vPvB assessment:** No data available.
- 12.6 Other adverse effects:** No data available.

Section 13. Disposal Considerations

- 13.1 Waste Disposal Method:** Do not discharge into drains or the environment. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle by distillation. Do not landfill. Incinerate under surveillance with energy recovery. May be discharged to company wastewater treatment plant.

Section 14. Transport Information

14.1 LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Environmentally hazardous substances, liquid, n.o.s. (tris(methylphenyl)phosphate)
Not regulated under 5 liters.

DOT Hazard Class: 9 CLASS 9

UN/NA Number: UN3082 **Packing Group:** III

Precautionary Label: NOT REGULATED UNDER 5 LITERS PER BOX.



14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name:

UN Number: 3082 **Packing Group:** III

Hazard Class: 9 - CLASS 9

14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: UN number : 3082
Description of the goods : Environmentally hazardous substance, liquid, n.o.s. (tris(methylphenyl) phosphate, Phenyl-alpha-naphthylamine)
Class : 9
Packing group : III
Environmentally hazardous : no.

UN Number: 3082 **Packing Group:** III

Hazard Class: 9 - CLASS 9

Section 15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
1330-78-5	Tritolyl phosphate (MIL-PRF-7808L OIL)	No	No	No
90-30-2	N-Phenyl-1-naphthylamine (MIL-PRF-7808L OIL)	No	No	No
88-27-7	Phenol,4-(dimethylamino)methyl-2,6-bis(1,1-dimethylethyl)- (MIL-PRF-7808L OIL)	No	No	No
7787-32-8	Barium fluoride	No	No	Yes-Cat. N040

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Explosive	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Acute toxicity (any route of exposure)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Flammable (gases, aerosols, liquid, or solid)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Skin Corrosion or Irritation
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Oxidizer (liquid, solid or gas)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Serious eye damage or eye irritation
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Self-reactive	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Respiratory or Skin Sensitization
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Pyrophoric (liquid or solid)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Germ cell mutagenicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Pyrophoric gas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Carcinogenicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Self-heating	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Reproductive toxicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Organic peroxide	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Specific target organ toxicity (single or repeated exposure)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Corrosive to metal	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Aspiration Hazard
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Gas under pressure (compressed gas)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Simple Asphyxiant
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No In contact with water emits flammable gas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Health) Hazard Not Otherwise Classified (HNOC)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Combustible Dust	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Physical) Hazard Not Otherwise Classified (HNOC)	

