SAFETY DATA SHEET

Version 2.1
Revision Date: 09/13/2017

1. IDENTIFICATION

Product Identifiers

Product Name: TW25B® Synthetic Grease
Product Number: TW25B-1SY12 (25151-NSN9150-01-448-2266),
TW25B-1SP11 (25211-NSN9150-01-439-0859),
TW25B-4SP14 (25241-NSN9150-01-439-1873),
TW25B-1JSL16 (25381-NSN9150-01-439-0858),
TW25B-6NZ17 (25701-NSN9150-01-439-0857),
TW25B-1NC17 (25861-NSN9150-01-439-1864),
TW25B-1JSL17 (25361-NSN9150-01-535-8338),
TW25B-1JSL18 (25331-NSN9150-01-535-8687)
Trade Name: TW25B® Synthetic Grease
General Use: Lubricant Protectant
Chemical Family: Synthetic Based Lubricating Oil

Relevant Identified Uses

Identified Uses: Synthetic Multi-Purpose Grease Waterproof with Anti-Wear Properties

Supplier Details

Company: Mil-Comm Products Company, Inc.
2 Carlton Avenue
East Rutherford, NJ 07073
Phone: (201) 935-8561

Emergency Telephone Number

CHEMTREC (24/7 - Customer ID: CCN715902)
Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2. HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Toxic to Reproduction - Category 2

Note: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products and their shipping containers.

GHS Label Elements

Hazard Pictogram(s):

Signal Word: Warning

Hazard Statement(s): H361 Suspected of damaging fertility or gestation if swallowed in large amounts

Precautionary Statement(s)

Prevention: P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves, clothing and eye protection.
Response: P308+P313 If exposed or concerned: Get medical attention.
Storage: P405 Store locked up.
Disposal: P501 Dispose of contents and container in accordance with local and national regulations.

Hazards Not Otherwise Classified (HNOC) – None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Other Means of Identification: Industrial Lubricant

Ingredients

Chemical Name, Empirical Formula	CAS Number	EINECS Number	Percentage (%)
Non-Hazardous Ingredients*	Proprietary	Proprietary	93-97%
Phosphoric acid, tris(methyl phenyl) esters	1330-78-5	215-548-8	3-7%

* The exact composition of Non-Hazardous Proprietary Ingredients is a trade secret in accordance with paragraph (i) of §1910.1200.

Hazardous Components
Phosphoric acid, tris(methyl phenyl) esters

Additional Information
In accordance with the results of high temperature product degradation testing using IC, FTIR, RGA-MS, TGA and ICP, emission of decomposition products from proprietary ingredients including PTFE are insignificant. This analysis has substantiated that any trace level components which might be present, including HF, are inextricably bound, environmentally unavailable, and at de minimis concentrations. These results, combined with decades of application data demonstrating these products to be harmless under both normal conditions of use and in extreme upset scenarios, have resulted in the exclusion of proprietary ingredients from further reporting and/or classification as either a health or environmental hazard.

4. FIRST AID MEASURES

Description of Necessary First Aid Measures

Eye Contact: In case of eye contact, flush eyes with water. If necessary, seek medical attention.

Inhalation: This material has a low vapor pressure and is not expected to be inhaled at ambient conditions. Should adverse effects occur, remove to uncontaminated area.

Skin Contact: Use good hygiene practices including use of protective gloves and skin coverings as appropriate. After use, wash exposed skin with soap and water. If irritation occurs, seek medical attention.

Ingestion: Not an anticipated route of exposure. Do not induce vomiting unless directed by a medical professional. Rinse mouth with water and give small amounts of water to drink. Get medical attention if symptoms develop.

Most Important Symptoms/Effects, Acute and Delayed

Potential Acute Health Effects

Eye Contact	May cause slight eye irritation.
Inhalation	No information available.
Skin Contact	May cause slight skin irritation.
Ingestion	Swallowing large amounts may cause gastric upset.

Over-Exposure Signs/Symptoms

Eye Contact	May cause slight eye irritation.
Inhalation	No information available.
Skin Contact	May cause slight skin irritation.
Ingestion	May cause abdominal cramps and diarrhea.

Indication of any Immediate Medical Attention and Special Treatment Needed
Treat symptomatically. Seek medical care if large quantities have been ingested or inhaled.

5. FIREFIGHTING MEASURES

Suitable Extinguishing Media
Use an extinguishing agent suitable for the surrounding fire.

Unsuitable Extinguishing Media
None Known

Special Hazards Arising from the Chemical
When heated to decomposition, product may emit oxides of carbon and phosphorus.

Hazardous Thermal Decomposition Products
None known under expected conditions of use and storage.

Special Protective Actions for Firefighters
Cool fire-exposed containers and structures with water.

Special Protective Equipment for Firefighters
Fire-fighters should wear protective equipment appropriate to the fire hazard which exists.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

For Non-Emergency Personnel
Avoid contact with eyes, skin and clothing. Wear appropriate protective clothing. May cause surfaces to be slippery and present a slip hazard. Wash clothing before re-use.

For Emergency Responders

Environmental Precautions
Avoid environmental release. Report releases as required by local, state and federal authorities.

Methods and Material for Containment and Cleaning Up
Dike and collect liquid with an inert absorbent and place in labeled containers for disposal. Wash spill area thoroughly.

7. HANDLING AND STORAGE

Precautions for Safe Handling
Wear personal protective equipment in accordance with those recommendations provided in Section 8. Use good hygiene practices and wash hands and face before eating, drinking or conducting personal hygiene. Reduce contamination from clothing and protective equipment before entering eating areas.

Keep containers closed when not in use. Do not reuse containers.

Conditions for Safe Storage, Including any Incompatibilities
Store in a cool, dry, well-ventilated area away from heat and incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits (Classified Ingredients):

Phosphoric acid, tris(methyl phenyl) esters (Tricresyl Phosphate)
OSHA (PEL): 0.1 mg/m^3 – averaged over an 8-hour work shift
NIOSH (REL): 0.1 mg/m^3 – averaged over a 10-hour work shift
ACGIH (TLV): 0.1 mg/m^3 – averaged over an 8-hour work shift

Engineering Controls: Observe occupational exposure limits and provide local ventilation as necessary to minimize exposure levels.

Personal Protection:

Hygiene Measures: No specific recommendation made, but good hygiene practices are advised. Wash hands, forearms and face after handling products and prior to eating, smoking, and using the lavatory.

Eye/Face Protection: Wear eye protection where there is danger of eye contact. Provide eyewash station.

Skin and Body Protection: Follow good Industrial Hygiene practices. Wash hands at the end of each work shift and before eating, smoking, and personal hygiene.

Respiratory Protection: This material has a low vapor pressure and is not expected to present an inhalation hazard at ambient conditions. In those operations where elevated exposure levels could occur, an approved respirator with the appropriate vapor cartridges or supplied air respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Soft grease (NLGI 1)
Color:	Off-white
Upper/lower flammability/explosive limits:	Not Applicable
Odor:	Sweet odor
Odor threshold:	Not Determined
Vapor pressure:	Not Determined

Vapor density:	Not Determined
VOC Content:	<0.1%
Viscosity:	Not Determined
pH:	Not Determined
Specific Gravity:	1.29 (Water =1)
Melting/Freezing point:	Not Determined
Solubility(ies)	Insoluble in water
Initial boiling point and boiling range:	Not Determined
Partition coefficient: n-octanol/water:	Not Determined
Flash point:	Not Determined
Auto-ignition temperature:	Not Determined
Evaporation rate	Not Determined
Decomposition temperature:	Not Determined
Flammability (solid, gas):	Not Applicable

10. STABILITY AND REACTIVITY

Reactivity
Stable under normal temperature conditions.

Chemical Stability
Stable under normal storage and handling conditions.

Possibility of Hazardous Reactions
None known under normal conditions of storage and use.

Conditions to Avoid *(e.g., static discharge, shock, or vibration)*
None known

Incompatible Materials
Avoid oxidizing agents, strong acids and strong bases.

Hazardous Decomposition Products
When heated to decomposition, product may emit oxides of carbon and phosphorus.

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity: This product is not classified.

Irritation/Corrosion: This product is not classified.

Sensitization: This product is not classified.

Mutagenicity: This product is not classified.

Carcinogenicity: This product is not classified.

Reproductive Toxicity: Although there is no data to indicate that Phosphoric acid, tris(methylphenyl) esters pose a reproductive hazard to humans, Phosphoric acid, tris(methylphenyl) esters are suspected of damaging fertility or gestation in test animals if ingested in large amounts. As a grease product, oral exposure to humans is very unlikely.

Male Long-Evans rats received 0, 100, or 200 mg/kg and females received 0, 200, or 400 mg/kg Phosphoric acid, tris(methylphenyl) esters in corn oil by gavage for 56 days in males and 14 days prior to breeding in females, and were also given doses throughout the 10-day mating period. Sperm concentration, motility, and progressive movement were decreased for 200 mg/kg dose group males. A dose-dependent increase in abnormal sperm morphology was observed for males in both Phosphoric acid, tris(methylphenyl) esters dose groups. The percent of sperm-positive females per group was unchanged, but the number of females delivering live young was severely decreased by Phosphoric acid, tris(methylphenyl) esters exposure. Litter size and pup viability were decreased in the 400 mg/kg dose group. Pup body weight and developmental landmarks were unaffected by Phosphoric acid, tris(methylphenyl) esters exposure. Histopathologic changes were observed in the testes and epididymides of male rats and in the ovaries of female rats exposed to undiluted Phosphoric acid, tris(methylphenyl) esters.

Teratogenicity: This product is not classified.

Specific Target Organ Toxicity (Single Exposure): This product is not classified.

Specific Target Organ Toxicity (Repeated Exposure): This product is not classified.

Aspiration Hazard: This product is not classified.

Information on the Likely Routes of Exposure (Dermal Contact, Eye Contact, Inhalation, Ingestion)

Potential Acute Health Effects

Eye Contact: May cause slight eye irritation with redness, tearing, and blurred vision.

Inhalation: No adverse effects are expected under normal use conditions.

Skin Contact: May cause slight irritation

Ingestion: Swallowing small amounts is not expected to cause adverse effects.

Symptoms Related to the Physical, Chemical and Toxicological Characteristics

Eye Contact: May cause slight eye irritation with redness, tearing, and blurred vision.

Inhalation: No adverse effects are expected under normal use conditions.

Skin Contact: Prolonged product exposure may cause slight irritation or redness.

Ingestion: Swallowing large amounts may cause gastric upset with nausea, vomiting and diarrhea.

Delayed and Immediate Effects and Also Chronic Effects from Short and Long Term Exposure

Short Term Exposure

Potential Immediate Effects: Slight eye and skin irritation may occur.

Potential Delayed Effects: Slight eye and skin irritation may occur.

Long Term Exposure

Potential Immediate Effects: Slight eye and skin irritation may occur.

Potential Delayed Effects: Slight eye and skin irritation may occur.

Potential Chronic Health Effects

General: Slight eye and skin irritation may occur.

Carcinogenicity: No Known Significant Effects or Critical Hazards.

Mutagenicity: No data available.

Teratogenicity: No Known Significant Effects or Critical Hazards.

Developmental Effects: Based on the results of testing performed on laboratory animals, prolonged product ingestion may cause adverse effects on reproductive health.

Fertility Effects: Based on the results of testing performed on laboratory animals, prolonged product ingestion may cause adverse effects on reproductive health.

Numerical Measures of Toxicity

Acute Toxicity Estimates: No data available for this product.

Toxicity: Phosphoric acid, tris(methyl phenyl) esters: Oral rat LD50 > 5000 mg/kg, inhalation rat LC50 > 5.2 mg/L/4-hr, dermal rabbit LD50 > 10000 mg/kg

Persistence and Degradability: No data available for this product.

Bioaccumulative Potential: No data available for this product.

Mobility in Soil (Soil/Water Partition Coefficient): No data available for this product.

Other Adverse Effects: None known

12. ECOLOGICAL INFORMATION

Ecotoxicity

Phosphoric acid, tris(methyl phenyl) esters is toxic to aquatic life with long lasting effects. Although the concentration of this chemical within the mixture is considered insignificant, avoid release to the environment.

Acute Fish Toxicity

Phosphoric acid, tris(methyl phenyl) esters: Pimephales promelas LC50: 0.6 mg/L/96-hr

Persistence and Degradability

Phosphoric acid, tris(methyl phenyl) esters: Not readily biodegradable

Bioaccumulative Potential
No data available.

Mobility in Soil
No data available.

Other Adverse Effects
No data available.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods
Dispose of waste and residues in accordance with local and national environmental requirements.

14. TRANSPORT INFORMATION

	DOT Classification	IMDG	IATA
UN Number	UN3082	UN3082	UN3082
UN Proper Shipping Name	Environmentally Hazardous Substance, LIQUID, NOS - tris(Methylphenyl) phosphate	Environmentally Hazardous Substance, LIQUID, NOS - tris(Methylphenyl) phosphate. Marine pollutant	Environmentally Hazardous Substance, LIQUID, NOS - tris(Methylphenyl) phosphate
Transport Hazard Class(es)	9	9	9
Packing Group	III	III	III
Environmental Hazard	Yes	Yes	Yes

AERG: 171

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

Special Precautions for User: Not applicable

Additional Information: Non-bulk packages of this product are not regulated as hazardous materials unless transported by inland waterway. This product is not regulated as a hazardous material when transported in sizes of ≤5 L or ≤5 kg, provided the packaging meets general provisions of DOT §§ 173.24 and 173.24a; IMDG 4.1.1.1, 4.1.1.2 and 4.1.1. 4 to 4.1.1.8.; and IATA 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

15. REGULATORY INFORMATION

US Federal Regulations

TSCA 8(a) PAIR
Not determined

TSCA 8(a) CDR Exempt/Partial exemption
Not determined

United States Inventory (TSCA 8b)
All components are listed or exempted

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAP's)
Not listed

Clean Air Act Section 602 Class I Substances
Not listed

Clean Air Act Section 602 Class II Substances
Not listed

DEA List I Chemicals (Precursor Chemicals)
Not Listed

DEA List II Chemicals (Essential Chemicals)
Not Listed

SARA 302/304 - Composition/Information on Ingredients
None

SARA 313/304 RQ
Not Applicable

SARA 311/312 - Classification
Toxic to Reproduction (Fertility) - Category 2
Toxic to Reproduction (Unborn child) - Category 2

SARA 313
Not applicable. This product does not contain chemicals subject to SARA Title III Section 313 Reporting requirements.

State Regulations

California Proposition 65 Components
Not applicable

Other State Right to Know Components
No investigation of State and Local requirements was performed. For details on these regulatory requirements, contact the appropriate agencies within your region.

16. OTHER INFORMATION

Procedures Used to Drive Classification

Classification	Justification
Toxic to Reproduction (Fertility) - Category 2	Calculation method
Toxic to Reproduction (Unborn child) - Category 2	Calculation method

Further Information
License granted to make unlimited paper copies for internal use only. The above information is believed to be correct as of the date of preparation.

The information in this document should be used only as a guide in applying the appropriate safety precautions and professional consultation is advised. Should a significant change be made in product composition, this information will undergo revision as appropriate. Mil-Comm Products Company shall not be held liable for any damage resulting from the end user's handling or contact with these products.

Document History

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Prior Revision Dates: 5/3/16, 3/4/16, 6/6/15, 5/8/17