DATE: 11/6/15

Section 1 – Identification of the Mixture and Supplier

Product Name: TFG-1 WATER BASE GRINDING COOLANT



CAS Number: Mixture-Not Established

Product Description: Free Abrasive Machining, Lapping, and Polishing Process

Manufacturer/Supplier: Lapmaster-Wolters, LLC, 501 W. Algonquin Rd., Mt. Prospect, IL 60056

Phone: (224) 659-7101 Work Hours 8-5:30 CST

EMERGENCY PHONE NUMBER (CHEMTREC) 800-424-9300 or 703-741-5500

Section 2 – Hazard Identification

Health	Environmental	Physical
Skin Irritant – Category 3 Eye Irritant – Category 2B Acute Toxicity/Oral- Category 4 Acute Toxicity/Inhalation – Category 5 Carcinogenicity – Category 2	None Known	None Known

GHS Label Elements





Signal Word: Warning

Hazard Statements:

H200s = Physical H300s = Health H400s = Environmental

H302 Harmful if swallowed H316 Causes mild skin irritation H320 Causes eve irritation

H333 May be harmful if inhaled

H351 Suspected of causing cancer



HMIS

Health -1
Fire -1
React -0

PPE† Sec.8

Precautionary Statements:

P200s = Prevention P300s = Response P400s = Storage P500s = Disposal

P201 Obtain special instructions before use

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

P261 Avoid breathing fumes/mists/ vapors/ or spray

P264 Wash hands thoroughly after handling

P270 Do not eat/drink/or smoke when using this product

P271 Use only in a well ventilated area

P280 Wear protective gloves/clothing/and eye/face protection

P281 Use personal protective equipment as required

P301+312 If swallowed: call a poison center or doctor/physician if you feel unwell/rinse mouth with plenty of water

P332+313 If skin irritation occurs: get medical advice/attention

P305+351+338 If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+313 If eye irritation persists: get medical advice/attention

P304+340 If inhaled: remove victim to fresh air and keep at rest in a position comfortable for breathing

P304+312 If inhaled: call a poison center or doctor/physician if you feel unwell

P308+313 If exposed or concerned: get medical advice/attention

P403+233 Keep container tightly closed, store in a well-ventilated place

P501 Dispose of contents/container according to local regulations

Section 3 – Composition / Information on Ingredients

Ingredient Name	CAS No.	% WT.
*PROPRIETARY BLEND This product contains no ingredients which are known to be hazardous per (49 CFR 172.101 Table of Hazardous Materials) and per OSHA Standard (29 CFR 1910.1200). It has been determined this product is not hazardous.		

Section 4 – First Aid Measures

<u>Inhalation:</u> Nasal irritation, nausea, dizziness, coughing, and headache. Remove person from source of exposure to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Give artificial respiration if person is not breathing. GET MEDICAL ATTENTION IMMEDIATELY.

Skin Contact: Itching, or redness of skin. Immediately flush skin thoroughly with plenty of water for several minutes and then wash skin with soap and water. Remove contaminated clothing and wash before reuse. If skin irritation persists, GET IMMEDIATE MEDICAL ATTENTION.

Eye Contact: Eye irritation. Immediately flush eyes with a directed stream of water for at least 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. Remove contact lenses if present and easy to do. Continue Rinsing. If eye irritation persists, GET IMMEDIATE MEDICAL ATTENTION.

<u>Ingestion:</u> Irritation of the mouth and throat. Abdominal pain and nausea. Do not induce vomiting. If person is conscious, rinse mouth or give them a glass of water. If person is drowsy or unconscious and vomiting, place on the left side with head down. GET MEDICAL ATTENTION IMMEDIATELY.

Note to Physicians: Treat Symptoms

Special Precautions/Procedures: After first-aid, get appropriate in-plant, paramedic, or community medical support.

See Section 11 for more detailed information on health effects and symptoms.

Section 5 – Fire-Fighting Measures

Extinguishing Media: Water spray, dry chemical, carbon dioxide, and alcohol foam.

Unusual Fire or Explosion Hazards: None Known

Hazardous Combustion Products: Combustion of product can produce toxic gases (oxides of nitrogen) product may react with some metals (aluminum, zinc, tin) to release hydrogen gas.

Fire-Fighting Instructions: Under normal conditions this product is not combustible. Use extinguishing media appropriate for surrounding fire. Use water spray to cool nearby containers and structures exposed to fire. Do not release runoff from fire control methods into sewers or waterways. Keep personnel removed and upwind.

Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode with full protective clothing.

NFPA

Health -1 Fire -1 React - 0

Section 6 – Accidental Release Measures

Personal Precautions: Wear appropriate personal protective equipment as conditions warrant. (Review Section 8) Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Follow all precautions for handling spill (Review Section 7). Isolate spill or leak area and deny entry of untrained personnel.

Emergency Procedures: Isolate spill or leak. Eliminate all ignition sources. No smoking, flares, sparks, or flames in spill area. Ventilate spill area if fumes are present, keep unauthorized personnel away. Stay up-wind of any fumes.

Spill/Leak Containment and Cleanup: All equipment used when handling the spill must be grounded or non-sparking tools. Stop leak if you can do it without risk. Small spills: take up with sand or other non-combustible absorbent material and place into approved containers for later disposal. Large spills: dike area with non-combustible absorbent material to contain spill. Prevent spill from entering sewers, waterways, or low areas. Transfer spilled liquid and diking material to suitable approved containers for recovery or disposal. Do not flush spilled material into a sewer. Neutralize remaining spilled material with a diluted solution of acid if the spilled material is an alkaline or a diluted solution caustic if the spilled material is acidic. Clean up residue with soap and water. Do not flush to sewer or waterways. Prevent release to the environment.

Refer to Section 13 for Proper Disposal of Spilled Material.

Regulatory Requirements: Any environmental release of a material that could cause harm to people or to the environment must be reported immediately to the National Response Center (NRC) and to the appropriate state and local agencies.

Section 7 - Handling and Storage

Handling Precautions: Do not get in eyes, on skin or on clothing. Harmful if inhaled, absorbed through skin or swallowed. Prevent possible eye and skin contact by wearing the recommended protective clothing and equipment. Wash thoroughly after handling. Remove contaminated clothing after use. Do not breath vapors or mists; use with adequate ventilation. Do not ingest. Do not cut, grind, puncture, drill or weld on or near containers. Keep containers closed when not in use. Do not use pressure to empty containers. Always loosen closure cautiously when opening. Vapors are combustible to open flames. Use in an area that will allow for evaporation or run off. Prevent soil contamination and entry into storm and floor drains, streams and into any body of water.

Storage Requirements: Store in a cool, dry, well-ventilated area away from direct sunlight, heat, flames, and sparks in a controlled environment. Store at ambient or lower temperatures. Keep from freezing. Do not store near combustible materials or liquids. Do not store in open, unlabeled or mislabeled containers. Empty containers retain product vapor and residue. Follow all label warnings even after container is empty. Keep out of reach of children.

Section 8 – Exposure Controls / Personal Protection			
Exposure Limits / Guidelines Ingredient Name	OSHA PEL	ACGIH TLV	
*PROPRIETARY BLEND This material contains no ingredients which are known to be hazardous per (49 CFR 172.101 Table of Hazardous Materials) and per OSHA Standard (29 CFR 1910.1200). It has been determined that this product is not hazardous.			

Engineering Controls for Ventilation: Ensure good general ventilation. Use local exhaust ventilation to draw spray, mists and vapors away from work area to prevent inhalation of product fumes. Provide general or local exhaust ventilation systems using corrosive resistant materials to maintain airborne contaminants below any recommended or standard occupational exposure limits. Local exhaust ventilation is preferred because it prevents contamination dispersion into the work area by controlling it at its source. Ventilation guidelines may be found in OSHA Regulations (29CFR 1910.94) or in publications such as: American Conference of Governmental Industrial Hygienist.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: If using in a confined area and fumes are present, use a respirator. None required under normal circumstances of use if maintaining airborne contaminant concentrations below standard occupational exposure limits. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessel, or storage tanks), wear an SCBA. Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Eye Protection: Wear chemical safety goggles per OSHA eye and face protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses. Have an eye wash station available where eye contact can occur.

Skin Protection: Wear chemically protective gloves impervious to conditions of use. Neoprene, nitrate, or butyl type rubber gloves. Additional protection may be necessary to prevent skin contact, including use of apron, face shield, boots, or full body protection. A safety shower should be located in the general work area.

General Hygiene: Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Launder contaminated work clothes before reuse and keep personal protective equipment clean.

Section 9 – Physical and Chemical Properties

Appearance: Hazy Blue Liquid

Odor: Chemical Odor

pH: 8.5-9.5

Freeze Point: Estimated at 20°F (-6°C)

Boiling Point: Estimated above 200°F (93°C)

Odor Threshold: Not Determined Vapor Pressure: Not Determined Vapor Density (Air=1): Not Applicable Specific Gravity (H₂0=1, at 72°F): 1.02

Water Solubility: 100%

Flash Point: Estimated at above 250°F

Upper/Lower Flammability: Not Determined

Auto Ignition Temp: Not Determined

Evaporation Rate (Water=1): Not Determined Partition Coefficient, N-Octanol/Water: Not

Determined

Decomposition Temp: Not Determined

Viscosity: 15cps VOC Content: None

Section 10 – Stability and Reactivity

Reactivity: No dangerous reactions under normal conditions of use.

Chemical Stability: Stable in a controlled environment away from direct sunlight and stored at ambient temperatures.

Hazard Reactions: Hazardous reactions will not occur.

Conditions to Avoid: Combustible liquid. Avoid using or storing product in elevated temperatures or near heat, sparks, open flames

or ignition sources. Prolonged contact with metals could produce small amounts of flammable hydrogen gas.

Incompatible Materials: Strong oxidizers, reducing agents and acids.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, and other toxic gases.

Section 11 – Toxicology Information

*Specific tests have not been conducted on this product. Our evaluations based on information from similar products, the ingredients and technical literature. Data for this material has been used to estimate the symptoms and effects of exposure.

Eyes Eye contact with liquid or mists can cause severe irritation.

Skin LD50: Not Established/ No Data

Brief contact may cause irritation to the skin. Prolonged contact may cause moderate skin

irritation resulting in local redness. This product is not known to be a sensitizer.

Inhalation LC50: Not Established/ No Data

The product is not expected to present a significant inhalation hazard if work area is properly ventilated. Prolonged inhalation of vapors, mists, or fumes will cause irritation of respiratory

tract creating headaches, nausea, weakness, and drowsiness.

11/6/15

Ingestion Oral LD50: Not Established/ No Data

Ingestion is not regarded as significant health hazard likely to arise from normal use.

Ingestion will cause severe irritation of mouth, throat, and digestive tract.

Abdominal pain, nausea, and vomiting may occur.

Chronic Toxicity There are no reports of long-term adverse toxic effects in man attributable to the use

of this type of product. The product does contain ingredients, or which are derived from components, that potentially may affect the following target organs: eyes, skin, and

respiratory system.

Carcinogenicity IARC, NTP, and OSHA do list one of the ingredients: "Diethanolamine" as a potential

carcinogen. IARC: lists it as a group "G3" Carcinogen, not classified as to the carcinogenicity in humans. ACGIHI: lists it as an "A3" Animal Carcinogen.

Mutagenicity There are no reports of mutagenic effects attributable to the use of this type of product

or from its ingredients.

Reproductive ToxicityThere are no reports of reproductive effects attributable to the use of this type of product

or from its ingredients.

Section 12 – Ecological Information

*Specific tests have not been conducted on this product. Our evaluation is based on information from similar products, the ingredients and technical literature. This information should be used only for a small truck spill and not meant to address discharges to sewers or treatment plants. Data for this material has been used to estimate its environmental impact.

Toxicity: This material has a low potential for toxicity. Moderate biochemical oxygen demand and moderate potential to cause oxygen depletion in aqueous systems. A moderate potential to affect aquatic organisms.

Environmental Degradation: This product is readily biodegradable when diluted with large amounts of water, this material released into the environment is not expected to have a significant impact. (Minimum of 50 parts water to 1 part product). A low potential to persist in the environment.

Soil Absorption/ Mobility: This material is expected to be mobile in soil and not expected to absorb to suspended solids or sediments in water. A moderate potential to affect plant life.

Section 13 – Disposal Considerations

Waste Disposal Methods: As sold, this product when discarded or disposed of is a non-hazardous waste. The transportation, storage, treatment, and disposal of this waste material must be conducted in compliance with (40CFR 261, 262, 263, 264, 268, and 270). Do not discharge this material into lakes, streams, ponds, or other waters. Do not discharge this material into sewer systems without the approval from local sewage treatment plant authority. Care must be taken to prevent environmental contamination from the use of this material. If material is not approved to be discharged into sewer system, contact a licensed waste management contractor for detailed recommendations for disposal. Follow all applicable Federal, state, and local regulations. This non-hazardous liquid can be incinerated if it meets all OSHA and EPA regulations. Incinerate at a licensed waste disposal site with approved environmental authority. If this product is altered, it is the responsibility of the user to determine whether the material meets the criteria for hazardous waste at the time of disposal.

Disposal Regulatory Requirements: Follow applicable NRC, CERCLA, SARA, and RCRA regulations.

Container Cleaning and Disposal: Prior to cleaning or disposing of container, use caution when handling empty container (possible combustible vapors). Do not use pressure to empty containers. Empty containers retain product vapors or residue that could be combustible. Follow all label warnings even after container is empty. Do not cut, weld, braze, solder, drill, grind, or expose empty containers to heat, flames or other sources of ignition. Follow applicable Federal, state, and local OSHA and EPA regulations.

Section 14 – Transportation Information

Domestic US Road Transportation DOT (49 CFR 172.101):

Not Regulated as a Hazardous Material or Dangerous Goods.

Canadian Road Transportation (TDG):

Not Regulated as a Hazardous Material or Dangerous Goods.

Ocean Transportation (IMO.IMDG) (49 CFR 172.101):

Not Regulated as a Hazardous Material or Dangerous Goods.

Air Transportation (ICAO/IATA) (49 CFR 172.101):

Not Regulated as a Hazardous Material or Dangerous Goods.

Section 15 – Regulatory Information

U.S. Federal Regulations

Toxic Substance Control Act Inventory Status (TSCA):

The components for this product are on the TSCA Inventory or are exempt from TSCA Inventory Requirements.

Superfund Amendments and Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (40 CFR 355):

Components: Concentration:

None

Section 311/312 Hazard Class (40 CFR 370):

Immediate Hazard: No
Delayed Hazard: No
Fire Hazard: No
Pressure Hazard: No
Reactive Hazard: No

Section 313 Toxic Chemicals (40 CFR 372):

Components: Reporting Threshold: Diethanolamine (111-42-2) Trace Amounts

<u>Comprehensive Environmental Response and Liability Act (CERCLA):</u>

Section 304 CERCLA Hazardous Substances (40 CFR 302):

Components:

Diethanolamine (111-42-2)

Trace Amounts

OSHA Air Contaminants Standard (20 CFR 1910.1000):

The following components of this product are listed as having limits for air contaminants:

None

State Regulations

California Proposition 65:

The product contains the following chemicals known to State of California to cause cancer or birth defects based on maximum impurity levels of components:

Diethanolamine (111-42-2) Trace Amounts (Possible Carcinogenic in Humans)

Ethylene Oxide (75-21-8) Trace Amounts 1,4 Dioxane (123-91-1) Trace Amounts Formaldehyde (50-00-0) Trace Amounts

Pennsylvania, Massachusetts & New Jersey Hazardous Substance List Right to Know:

The following components in the product are listed as hazardous at levels which require reporting: Diethanolamine (111-42-2) Trace Amounts

International Regulations

Canadian Environmental Protection Act (CEPA):

The Components of this product are included on the Canadian Domestic Substance List (DSL)

Canadian Workplace Hazardous Materials Information System (WHIMS):

None

Section 16 – Other Information

THIS PRODUCT IS CERTIFIED TO BE ROHS COMPLIANT

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