Prepared according to Global Harmonized System (GHS) standards

SECTION 1 CHEMICAL PRODUCT IDENTIFICATION

Lubrication Technologies, Inc.
900 Mendelssohn Avenue North
Golden Valley, MN 55427-4309
Tel: 763-545-0707

Product Trade Name: **Hartland Tough Stuff**

CAS Number:	Mixture.
Synonyms/Other:	Not applicable.
Part Number(s):	Not applicable.
Recommended Use:	Acid cleaner
Restrictions on Use:	Not determined.
Created Date:	3/28/2016
Preparation/Revision Date:	6/14/2016
Emergency Phone Number:	1-800-424-9300 (CHEMTREC)
SDS CODE:	13884

SECTION 2 HAZARD IDENTIFICATION

Appearance:	Clear to pink
Odor:	Very mild
Classification:	Skin corrosion / irritation category 1 Eye damage / irritation category 1 Acute Toxicity - oral category 4
Target Organs:	Skin
Pictogram(s):	
Signal Word:	DANGER
Hazard Statement:	H302 - Harmful if swallowed H314 - Causes severe skin burns and eye damage H318 - Causes serious eye damage
Other Hazards:	Not determined.
Prevention:	P260 - Do not breathe fumes, mist, vapours or spray P264 - Wash thoroughly after handling P270 - Do not eat, drink or smoke when using this product P280 - Wear protective gloves and eye protection
Response:	P303+P361+P353 - IF ON SKIN (or hair): Remove all contaminated clothing. Rinse skin with water/shower P363 - Wash contaminated clothing before reuse P301+P312 - IF SWALLOWED: Call a physician if you feel unwell P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing P310 - Immediately call a physician P321 - Specific treatment (see Section 4)
Storage Procedures:	P405 - Store locked up
Disposal:	P501 - Dispose of contents and container in accordance with federal, state, and local regulations
Other:	See section 11 for complete health hazard information.

SECTION 3 COMPOSITION OF INGREDIENTS

Component	CAS Number	Percentage (by weight)
Carbamide Hydrochloride	506-89-8	25-50%
Hydrogen Chloride	7647-01-0	0.1-1.0%
Nonylphenoxypoly (ethyleneoxy) ethanol	9016-45-9	0.1-1.0%

The balance of components do not contribute to the overall classification of the fluid, according to the GHS Standard.

SECTION 4 FIRST AID MEASURES

Eye Contact: Avoid direct contact. Wear chemical protective gloves, if necessary. Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately call a doctor.

Skin Contact: Avoid direct contact. Wear chemical protective clothing, if necessary. Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash skin with lukewarm, gently flowing water and mild soap until product is removed. Immediately call a doctor. Call a doctor if you feel unwell. Discard contaminated clothing.

Inhalation: Get medical advice or attention if you feel unwell or are concerned.

Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

Other: No additional information

SECTION 5 FIRE FIGHTING MEASURES

Flash Point: Not applicable.

Flammable limits: Not applicable.

Extinguishing media: Not applicable.

Special firefighting procedures: General directions - product will not burn without driving water from material first. Evacuate area and fight fire from a safe distance. If leak or spill has not ignited, ventilate area and use water spray to disperse gas or vapor and to protect personnel attempting to stop a leak. Use water spray to cool adjacent structures and to protect personnel. Shut off source of flow if possible (safely). Stay away from storage tank ends. Withdraw immediately in case of rising sound from venting safety device or any discoloration of storage tank due to fire. Fire fighters must wear MSHA/NIOSH approved positive pressure breathing apparatus (SCBA) with full face mask and full protective equipment.

Unusual fire & explosion hazards: High temperatures may create heavy flammable vapors that may settle along ground level and low spots to create an invisible fire hazard.

Byproducts of combustion: Fires involving this product may release oxides of carbon, nitrogen and sulfur; reactive hydrocarbons and irritating vapors.

Autoignition temperature: Not determined.

Explosion data: Not determined. Care should always be exercised in dust/mist areas.

Other: Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill control procedures (land): Immediately turn off or isolate any source of ignition (pilot lights, electrical equipment, flames, heaters, etc.). Evacuate area and ventilate. Personnel wearing proper protective equipment should contain spill immediately with inert materials (sand, earth, chemical spill pads of cotton) by forming dikes. Dikes should be placed to contain spill in a manner that will prevent material from entering sewers and waterways. Neutralize material using a weak base or neutralizing product. Large spill, once contained, may be picked up using explosion proof, non-sparking vacuum pumps, shovels, or buckets, and disposed of in suitable containers for disposal. Clean up residue with water. If a large spill occurs notify appropriate authorities. In case of road spill or accident contact Chem-Trec (800-424-9300).

Spill control procedures (water): If a large spill occurs notify appropriate authorities (normally the National Response Center or Coast Guard at 800-424-8802).

Waste disposal method: Do not empty into drains. All disposals must comply with federal, state, and local regulations. The material, if spilled or discarded may be a regulated waste. Refer to state and local regulations. Department of Transportation (DOT) regulations may apply for transporting this material when spilled. See Section 14.

Other: CAUTION - If spilled material is cleaned up using a regulated solvent, the resulting waste mixture will be regulated.

SECTION 7 HANDLING AND STORAGE

Handling procedures: Keep containers closed when not in use. Do not transfer to unmarked containers. Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld, or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.
Handling temperatures should not exceed 60°C (140°F) to minimize danger of burns. Open containers carefully in a well ventilated area or use appropriate respiratory protection. Wash thoroughly after handling.

Storage procedures: Store containers away from heat, sparks, open flame, or oxidizing materials. Extended storage at excessive temperatures may produce odorous and toxic fumes from product decomposition.

Additional information: No additional information.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits/standards for materials that can be formed when handling this product:

Component	CAS Number	OSHA PEL	ACGIH TLV
Carbamide Hydrochloride	506-89-8	-	-
Hydrogen Chloride	7647-01-0	5 ppm	2 ppm
Nonylphenoxypoly (ethyleneoxy)	9016-45-9	-	-

Not determined.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

No biological limits allocated.

Personal protection: Applicable mainly to persons in repeated contact situations such as packaging of product, service/maintenance, and cleanup/spill control personnel.

Respiratory protection:	None required if ventilation is adequate. Otherwise a respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed. Where misting may occur, wear an MSHA/NIOSH approved (or equivalent) half-mask form dust/mist air purifying respirator.
Eye protection:	Eye protection is strongly recommended. Wear safety glasses with side shields or vented/splash proof goggles (ANSI Z87.1 or approved equivalent).
Hand protection:	Impervious, chemically resistant gloves such as neoprene or nitrile rubber to avoid skin sensitization and absorption.
Other protection:	Use of an apron and overboots of chemically impervious materials such as neoprene or nitrile rubber is recommended based on level of activity and exposure. If handling hot material use insulated protective equipment. Launder soiled clothes. Properly dispose of contaminated leather articles and other materials which cannot be decontaminated.
Local control measures:	Use adequate ventilation when working with material in an enclosed area. Mechanical methods such as fume hoods or area fans may be used to reduce localized vapor/mist areas. If vapor or mist is generated when the material handled, adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specified exposure. Eyewash stations and showers should be available in areas where this material is used and stored.
Other:	Consumption of food and drink should be avoided in work areas where product is present. Always wash hands and face with soap and water before eating, drinking or smoking.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear to pink
Odor:	Very mild
Odor threshold:	Not determined.
pH:	0.5 – 1.5
Melting/Freezing point:	Not determined.
Initial boiling point:	Not determined.
Boiling range:	Not determined.
Flash point:	Not applicable.
Evaporation rate:	Similar to water
Flammability:	Non-flammable
Upper flammable limit:	Non-flammable
Lower flammable limit:	Non-flammable
Vapor pressure:	Not determined.
Vapor density:	Not determined.
Relative density:	SG: 1.12 - 1.15 at 15.6°C (60.0°F).
Solubility:	Miscible in water, negligible in most petroleum solvents.
Partition Coefficient:	Not determined.
Auto-ignition temperature:	Not determined.
Decomposition temperature:	Not determined.
Viscosity:	Not determined.
Other	Percent volatile: <0.1

SECTION 10 STABILITY AND REACTIVITY

Reactivity	
Chemical stability:	Material is chemically stable at room temperatures and pressure.
Hazardous polymerization:	Will not occur.
Conditions to avoid:	Avoid high temperatures and product contamination.

Incompatibility with other materials:	Avoid contact with acids and strong oxidizing materials.
Decomposition products:	Smoke, carbon monoxide, carbon dioxide, and other aldehydes of incomplete combustion. Oxides of carbon, nitrogen, and sulfur; reactive hydrocarbons and irritating vapors.
Other:	Not applicable.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity (LD50) *See note at the bottom of the section

Oral:	300 - 2000 mg/kg
Dermal:	>5000 mg/kg
Inhalation:	>20.0 mg/l
Skin irritation:	Causes severe skin burns and eye damage
Eye irritation:	Causes serious eye damage
Dermal sensitization:	Not expected to have a sensitizing effect.
Respiratory sensitization:	Not expected to have a sensitizing effect.
Aspiration Hazard:	Not applicable

Chronic Toxicity

Mutagenicity:	Not suspected of causing genetic defects
Carcinogenicity:	Not suspected of causing cancer.
Reproductive toxicity:	Not expected to have adverse effects on reproduction.
STOT-single exposure:	Not expected to have adverse effects.
STOT-repeated exposure:	Not expected to have long term adverse effects.
Other:	*All data in this section is based off calculations from Part 3 of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) utilizing information from the constituent components.

SECTION 12 ECOLOGICAL INFORMATION

Environmental toxicity

Fish:	> 100 mg/l.
Invertebrates:	> 100 mg/l.
Aquatic plants:	> 100 mg/l.
Microorganism:	> 100 mg/l.
Persistence/Degradability:	This product is expected to be readily biodegradable.
Bioaccumulation:	Not determined.
Mobility in soil:	Not determined.
Other:	All classifications are based on calculations in Part 4 of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) utilizing information from the constituent components.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste disposal:	This product unadulterated by other materials can be classified as a non-hazardous waste. Depending on use, used product may be regulated. Dispose of in a licensed facility. Do not discharge product in to sewer system. Dispose of containers by crushing or puncturing, so as to prevent unauthorized use of used containers. Waste management should be in full compliance with federal, state, and local laws.

Other The transportation, storage, treatment and disposal of RCRA waste material must be conducted in compliance with 40 CFR 262, 263, 264, 268 and 270. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate.

SECTION 14 TRANSPORT INFORMATION

Land Transport (DOT): Not Regulated for Land Transport
Proper Shipping Name: Not applicable.
Land Transport (TDG): Not Regulated for Land Transport
Proper Shipping Name: Not applicable.
Sea Transport (IMDG): Not Regulated for Sea Transport
Proper Shipping Name: Not applicable.
Air Transport (IATA): Not Regulated for Air Transport
Proper Shipping Name: Not applicable.
Other: Not applicable.

SECTION 15 REGULATORY INFORMATION

Federal Regulation

Clean water act/oil: No components of this product are listed.
TSCA: All components of this material are listed in the U.S. TSCA Inventory.
Other TSCA: Not applicable.
SARA title III: Section 302/304 extremely hazardous substances:
None.
Section 311, 312 hazard categorization:

Acute (immediate health effects):	YES
Chronic (delayed health effects):	NO
Fire (hazard):	NO
Reactivity (hazard):	NO
Pressure (sudden release hazard):	NO

Section 313 toxic chemicals:
No components present are at or greater than the de minimis (minimum reportable) concentration requirements for reporting.
CERCLA: Hydrochloric acid - 5000LBS

State Regulations

Right-to-know Not determined.
Other: A release of this product, as supplied, is exempt from reporting under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). However, releases may be reportable to the Nation Response Center under the Clean Water Act, 33 U.S.C. 1321(b)(3) and (5) - see head of Section 15. Failure to report may result in substantial civil and criminal penalties.

Recommend contacting the local authorities in the event of any type of spill to determine local reporting requirements and also to aid in the cleanup.

SECTION 16 OTHER INFORMATION

	NFPA 704	NPCA-HMIS	KEY
HEALTH:	2	2	0 = Minimal
FIRE:	0	0	1 = Slight
REACTIVITY:	0	0	2 = Moderate
SPECIFIC HAZARD:	None	N/A	3 = Serious
PROTECTION INDEX:	N/A	B	4 = Severe

Version: II

Revisions / Comments: Update to product appearance. 06/14/16