NUBLEND
From NUANCE SOLUTIONS

December 4, 2017

SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product identifier used on the label: Formula 5 Finished

Distributed by Tepe Sanitary Supply under private label name TSS 354 Degreaser

Other means of Identification: 1442

Recommended use of the chemical and restrictions on use: For professional use only.

Manufacturer/Supplier: Nuance Solutions
Address: 900 E 103rd St., Suite D
Chicago, IL 60628, United States
www.nuancesolutions.com

Telephone: +1 773-785-2300
Fax: 888 557 3331

24 Hr. Emergency Tel. #: INFOTRAC 1-800-535-5053 (North America)

SECTION 2 - HAZARDS IDENTIFICATION

Classification of the chemical:

Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1

Label elements:

Signal Word: Danger

Hazard statement(s): Causes severe skin burns and eye burns.

Precautionary statement(s)
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Store locked up.
Dispose of contents/container to an approved waste disposal plant

If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center of doctor/physician.

If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a poison center of doctor/physician.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center of doctor/physician.

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 control center of doctor/physician.

Hazard pictogram(s)

Other hazards not otherwise classified: None determined.

Unknown Acute Toxicity: 1.13% of the mixture consists of ingredient(s) of unknown toxicity.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name, Common Name & Synonyms:	CAS #	Weight-%
Ethylene Glycol Monobutyl Ether	111-76-2	3-7
Potassium hydroxide	1310-58-3	<5
Triethanolamine	102-71-6	<1

**** If the chemical name/CAS # is "proprietary" and/or the weight % is shown as a range, this information had been withheld as a trade secret.**

SECTION 4 - FIRST-AID MEASURES

Description of first aid measures:

If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

If in eyes: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

Most Important symptoms and effects, both acute and delayed: Causes severe skin burns and eye damage.

Indication of any immediate medical attention and special treatment needed: Treat symptomatically

SECTION 5 - FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable extinguishing media: Use extinguishable measures that are appropriate to local circumstances and the surrounding environment.

***Unsuitable extinguishing media*:** Not determined.

Special hazards arising from the substance or mixture: Material is corrosive.

Special protective equipment and precautions for firefighters:

Protective equipment for fire-fighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Special fire-fighting procedures: Not applicable.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment as required. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up: Prevent further leakage or spillage if safe to do so. Keep in suitable, closed containers for disposal.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling: Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Do not breathe dust/fumes/gas/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling.

Conditions for safe storage: Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep out of the reach of children. Store locked up.

Incompatible materials: Acids. Oxidizing agents. Bleach. Do not mix with other chemicals or cleaners.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits:			
Chemical Name	**ACGIH TLV**	**OSHA PEL**	**NIOSH IDLH**
Ethyelne Glycol Monobutyl Ether 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m^3 (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m^3 (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m^3
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m^3	(vacated) Ceiling: 2 mg/m^3	Ceiling: 2 mg/m^3
Triethanolamine 102-71-6	TWA: 5 mg/m^3	-	-
Proprietary	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m^3 (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m^3 (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m^3	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m^3 STEL: 500 ppm STEL: 1225 mg/m^3

Exposure controls:

Ventilation and engineering measures: Apply technical measures to comply with the occupational exposure limits. Eyewash stations. Showers.

Respiratory protection: Ensure adequate ventilation, especially in confined areas.

Skin protection: Wear suitable protective clothing.

Eye face protection: Wear approved safety goggles where a splash hazard exists.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear purple solution

Odor: Solvent

Odor threshold: No applicable information available

pH: 13.5 (concentrate)

Melting/Freezing point: No applicable information available

Initial boiling point and boiling range: 100 ºC / 212 ºF

Flash point: None to boiling

Flashpoint (Method): No applicable information available

Evaporation rate (BuAe = 1): Similar to water

Flammability (solid, gas): Liquid-not applicable

Lower flammable limit (% by vol.): Not Flammable

Upper flammable limit (% by vol.): Not Flammable

Vapor pressure: No applicable information available

Vapor density: No applicable information available

Relative density: 8.68 lb/gal

Solubility in water: Soluble

Other solubility(ies): No applicable information available

Partition coefficient: No applicable information available

Auto ignition temperature: No applicable information available

Decomposition temperature: No applicable information available

Viscosity: Similar to water

Volatile organic Compounds (%VOC's): 6%

Other physical/chemical comments: No applicable information available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Not normally reactive

Chemical stability: Stable

Possibility of hazardous reactions: No hazardous polymerization

Conditions to avoid: Keep out of reach of children. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials.

Incompatible materials: Acids. Oxidizing agents. Bleach. Do not mix with other chemicals or cleaners.

Hazardous decomposition products: None known based on information supplied.

SECTION 11 - TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry - inhalation: Avoid breathing vapors or mists.

Routes of entry - skin & eye: Causes severe eye damage and skin burns.

Routes of entry - Ingestion: Do not taste or swallow.

Potential Health Effects:

Signs and symptoms of short term (acute) exposure:

Symptoms: Please see Section 4 of this SDS for symptoms.

Potential Chronic Health Effects:

Mutagenicity: Not expected to be mutagenic in humans.

Carcinogenicity: No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Chemical name	ACGIH	IARC	NTP	OSHA
Ethylene Glycol Monobutyl Ether 111-76-2	A3	Group 3		
Triethanolamine 102-71-6		Group 3		

ACGIH (American Conference of Governmental Industrial Hygienists)
A3 – Animal Carcinogen
IARC (international Agency for Research on Cancer)
Group 3 IARC componenets are "not classifiable as human carcinogens"

Reproductive effects: No applicable information available

Sensitization to material: Not applicable

Specific target organ effects: Not applicable

Medical conditions aggravated by overexposure: Not applicable

Toxicological data: Not applicable

See the following table for individual ingredient acute toxicity data.

Chemical name	CAS #	LD_{50} (Oral, rat)	LD_{50} (Dermal. Rabbit)	LC_{50} (4hr, Inhal., rat)
Water	7732-18-5	>90 mL/kg	-	-
Ethylene Glycol Monobutyl Ether	111-76-2	=470 mg/kg	=2270 mg/kg (Rat) = 220 mg/kg (Rabbit)	=2.21 mg/L 4 h = 450 ppm 4 h
Potassium hydroxide	1310-58-3	=214 mg/kg	-	-

Alkyl Phenol Ethoxylate	-	=1310 mg/kg	= 2 mL/kg	-
EDTA	60-00-4	=1700 mg/kg	-	-
Triethanolamine	102-71-6	=4190 mg/kg	> 2000 mg/kg (Rabbit) >16 mL/kg (Rat)	-
Sodium Silicate	1344-09-8	=1153 mg/kg	>4640 mg/kg	-
Proprietary		=20000 mg/kg	=20800 mg/kg	-
Proprietary		=4396 mg/kg	=12800 mg/kg (Rat) = 12870 mg/kg (Rabbit)	=72.6 mg/L 4 h

*All empty cells no applicable information available

Other important toxicological hazards: None reported.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: May be dangerous for the environment. No data is available on the product itself. Should not be released into the environment.

Component Information:

Chemical Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Ethylene Glycol Monobutyl Ether 111-76-2	-	1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50	-	1698-1940: 24 h Daphnia magna mg/L EC50 1000: 48 h Daphnia magna mg/L EC50
Potassium hydroxide 1310-58-3	-	80: 96 h Gambusia affinis mg/L LC50	-	-
EDTA 60-00-4	1.01: 72 h Desmodesmus subspicatus mg/L EC50	34-62: 96 h Lepomis macrochirus mg/L LC50 static 44.2 – 76.5: 96 h Pimephales promelas mg/L LC50 static	-	113: 48 h Daphnia magna mg/L EC50
Triethanolamine 102-71-6	216: 72 h Desmodesmus subspicatus mg/L EC50 169: 96 h Desmodesmus subspicatus mg/L EC50	10600-13000: 96 h Pimephales promelas mg/L LC50 flow-through 1000: 96 h Pimephales promelas mg/L LC50 static 450-1000: 96 h Lepomis macrochirus mg/L LC50 static	-	1386: 24 h Daphnia magna mg/L EC50
Sodium Silicate 1344-09-8	-	301-478: 96 h Leopmis macrochirus mg/L LC50 3185: 96 h Brachydanio rerio mg/L LC50 semi-	-	216: 96 h Daphnia magna mg/L EC50

		static		
Proprietary	19000: 96 h Pseudokirchneriella subcapitata mg/L EC50	51600: 96 h Oncorhynchus mykiss mg/L LC50 static 41-47: 96 h Oncorhynchus mykiss ml/L LC50 static 51400: 96 h Pimephales promelas mg/L LC50 static 710: 96 h Pimephales promelas mg/L LC50	-	10000: 24 h Daphnia magna mg/L EC50 1000: 48 h Daphnia magna mg/L EC50 Static
Proprietary	1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50	9640: 96 h Pimephales promelas mg/L LC50 flow-through 11130: 96 h Pimephales promelas mg/L LC50 static 1400000: 96 h Lepomis macrochirus µg/L LC50	-	13299: 48 h Daphnia magna mg/L EC50

Persistence and degradability: No applicable information available

Bioaccumulation potential: No applicable information available.

Mobility in soil:

Chemical Name	Partition Coefficient
Ethylene Glycol Monobutyl Ether 111-76-2	0.81
Potassium hydroxide 1310-58-3	0.83
Triethanolamine 102-71-6	-2.53

Other Adverse Environmental effects: No applicable information available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Handling for disposal: Disposal should be in accordance with applicable regional, national and local laws and regulations.

Methods of disposal: Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status:

Chemical Name	California Hazardous Waste Status
Potassium hydroxide 1310-58-3	Toxic Corrosive

RCRA: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste UN defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 - TRANSPORTATION INFORMATION

US 49 CFR/DOT information:

UN No.: Not Regulated

UN Proper Shipping Name: Not Regulated

Transport Hazard Class(es): Not Regulated

Packing Group: Not Regulated

Special Transportation Notes: None

SECTION 15 - REGULATORY INFORMATION

TSCA information: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

European EINECs information: All ingredients listed appear on the European EINECs inventory.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

US Federal Regulations:

CERCLA: : This material, as supplied, contains one or more substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity
Potassium hydroxide 1310-58-3	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ

SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS No	Weight-%	SARA 313 – threshold Values %
Ethylene Glycol Monobutyl Ether	111-76-2	3-7	1.0
Proprietary	-	Proprietary	1.0

CWA (Clean Water Act): This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Component	CWA – Reportable Quantities	CWA – Toxic Pollutants	CWA – Priority Pollutants	CWA – Hazardouns Substances
Potassium hydroxide 1310-58-3 (<5)	1000 lb	-	-	X

US State Regulations:

California Proposition 65: This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations:

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethylene Glycol Monobutyl Ether 111-76-2	x	x	x
Potassium hydroxide 1310-58-3	X	X	X
EDTA 60-00-4	X	X	X
Triethanolamine 102-71-6	X	X	X
Proprietary	X		X
Proprietary	X	X	X

SECTION 16 - OTHER INFORMATION

NFPA:	**Health Hazards**	**Flammability**	**Instability**	**Special Hazards**
	2	0	0	None
HMIS:	**Health Hazards**	**Flammability**	**Phsyical Hazards**	**Personal Protection**
	2	0	0	X

Legend:
ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
CSA: Canadian Standards Association
DOT: Department of Transportation
ECOTOX: U.S. EPA Ecotoxicology Database
EINECS: European Inventory of Existing Commercial chemical Substances
EPA: Environmental Protection Agency
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
IUCLID: International Uniform Chemical Information Database
LC: Lethal Concentration
LD: Lethal Dose
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
OECD: Organization for Economic Co operation and Development
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet Material Safety Data Sheet
STEL: Short Term Exposure Limit
TOG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

DISCLAIMER

END OF DOCUMENT