Product Name: Vibra Glo L-460 Date Issued: February 24, 2019

SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

Product Name: Vibra Glo L-460 Chemical Synonym / C#: c1220 Formula: Multi-component mixture Chemical Family: Alkaline detergent

Supplier: Vibra Finish Limited 5329 Maingate Dr. Mississauga, ONT. L4W1G6

SECTION 2: HAZARD IDENTIFICATION

Form: liquid Color: amber

Emergency Overview: Solutions and powders are severe eye irritants, and prolonged or repeated contact may cause skin irritation. Dusts and mists are irritating to the skin, mucous membranes, and upper respiratory tract. Read the entire SDS for a more thorough evaluation of the hazards.

OSHA Hazard Communication Standard: This product has been evaluated and classified as defined by OSHA Hazard Communication Standard, 29CFR 1910.1200.

GHS Classification:

Skin corrosion/irritation (Category 2)

Serious eye damage/eye irritation (Category 2)

Carcinogenicity (Category 2)

Hazardous to the aquatic environment, acute hazard (Category 2)

Hazardous to the aquatic environment, long-term hazard (Category 3)

Signal Word: Danger



Exclamation Mark,

Health Hazard

GHS Hazard Pictograms :

Hazard Statements:

H315 Causes skin irritation

H319 Causes serious eye irritation

H351 Suspected of causing cancer

H411 Toxic to aquatic life with long lasting effects

Precautionary Statements:

P102 Keep out of reach of children.

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

P264 Wash hands thoroughly after handling.

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

P302 + P353 + P363 IF ON SKIN: Rinse skin with water/shower. Wash contaminated clothing before reuse.

P332 + P313 IF SKIN irritation occurs: Get medical advice/attention.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 IF eve irritation persists: Get medical advice/attention.

P301 + P330 + P312 IF SWALLOWED: Rinse mouth. call a POISON CENTER or doctor/physician IF you feel unwell.

P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

P342 + P311 IF experiencing respiratory symptoms: call a POISON CENTER or doctor/physician.

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Precautionary Statements, continued:

P401 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards which do not result in classification:

None known. See Section 11 for Potential Health Hazards

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	CAS#	% (w/w)
Diethanolamine	111-42-2	1 - 5
Na4EDTA	64-02-8	1 - 5
Dipropylene glycol monomethyl ether	34590-94-8	1 - 5

Unlisted components are considered non-hazardous as per 29CFR1910.1200g2C. See section 15 for specific state right-to-know information if applicable.

SECTION 4 : FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Skin Contact: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Inhalation: Move to fresh air. Call a physician if symptoms develop or persist.

Ingestion: Rinse mouth. Get medical attention if symptoms occur.

Notes to physician : Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media: Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Fire Fighting Procedures: In the event of fire, cool tanks with water spray. Cool containers exposed to flames with water until well after the fire is out. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Unusual Fire and Explosion Hazards: During fire, gases hazardous to health may be formed. No unusual fire or explosion hazards noted.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

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Environmental precautions: Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

Steps to be taken in case material is released or spilled:

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

SECTION 7: HANDLING AND STORAGE

Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get this material in contact with eyes. Avoid contact with skin. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Storage Requirements: Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Hazardous Ingredient	ACGIH TLV (mg/m3) TWA	ACGIH TLV (mg/m3) STEL
Diethanolamine	15	-
Na4EDTA	-	-
Dipropylene glycol monomethyl ether	100 ppm	150 ppm

Engineering measures:

Ventilation / Local Exhaust / Mechanical Recommendations: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Personal protective equipment:

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Skin Protection: Wear appropriate chemical resistant clothing.

Eye Protection: Wear safety glasses with side shields (or goggles) and a face shield.

Other Protective Equipment: Wear appropriate chemical resistant clothing if splashing evident. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

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SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

Appearance / Odor: Clear amber liquid, odor nil.

Water Solubility: Complete pH (100%): 10

Specific Gravity: 1.01 Boiling Point (°F): 212+

Evaporation Rate(water=1): N/A % Volatile: N/A

Vapor Density(air=1): N/A

Vapor Pressure(mmHg): N/A

Flash Point: None

Flash Point Method Used: N/A

Flammable Limits: LEL = N/A UEL = N/A

SECTION 10: STABILITY AND REACTIVITY

Hazardous Decomposition Products: No hazardous decomposition products are known.

Chemical Stability: Material is stable under normal conditions. The product is stable and non-reactive

under normal conditions of use, storage and transport.

Conditions to Avoid: Avoid temperatures exceeding the flash point. Contact with incompatible

materials. No dangerous reaction known under conditions of normal use.

Incompatibility with other Substances: Strong acids.

Hazardous Polymerization: Hazardous polymerization will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Potential Health Hazards (as mild alkaline or detergent blend):

Inhalation: Inhalation of mists or dusts may cause irritation to respiratory tract. Symptoms from excessive inhalation or of concentrated product may include gasping or coughing and difficulty breathing. Excessive contact may cause damage to the nasal septum.

Skin Contact: May cause mild irritation. Concentrated or prolonged contact may cause irritation with redness and blistering.

Eye Contact: May cause mild irritation. Concentrated or prolonged contact may cause conjuctival edema and corneal destruction.

Ingestion: Swallowing may produce gastrointestinal upset. Symptoms from ingestion of large doses may include severe abdominal pain, vomiting, and diarrhea.

Toxicological Data (for diethanolamine):

Acute toxicity Not available.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity: Diethanolamine (CAS 111-42-2) 2B Possibly carcinogenic to humans.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure : Not applicable.

Specific target organ toxicity - repeated exposure : Not applicable.

Aspiration hazard Not applicable.

Chronic effects Prolonged exposure may cause chronic effects.

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Toxicological Data (as Na4EDTA):

Acute oral toxicity: LD50: 1,780 mg/kg Species: Rat Read-across (Analogy)

Acute inhalation toxicity: LC50 (Rat): > 1 - 5 mg/l Exposure time: 4 h Test atmosphere: dust/mist

Eye irritation : Result: Eye irritation

Target Organ Systemic Toxicant - Repeated exposure: Routes of exposure: Inhalation - May cause

damage to organs through prolonged or repeated exposure.

Toxicological Data (for Dipropylene glycol monomethyl ether) : Acute toxicity

Acute oral toxicity LD50 (rat): > 5,000 mg/kg Method: OECD Test Guideline 401 GLP: no Acute inhalation toxicity: LC0 (rat, male and female): > 275 ppm Exposure time: 7 h

Method: OECD Test Guideline 403 GLP: no Assessment: The component/mixture is low toxic after short term inhalation.

Acute dermal toxicity: LD50 (rabbit, male): 9,510 mg/kg Method: OECD Test Guideline 402 GLP: no

Skin corrosion/irritation

Species: rabbit Method: OECD Test Guideline 404 Result: No skin irritation GLP: no

Serious eve damage/eye irritation

Species: Human Result: Mild eye irritation Exposure time: 24 h Method: In vivo

Respiratory or skin sensitisation

Species: Human Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

- Test Type: Ames test Test species: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative GLP: yes
- Test Type: Chromosome aberration test in vitro Test species: Chinese hamster lung cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative GLP: yes
- Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity

Species: mouse, (male and female) Application Route: Inhalation Exposure time: 2 yr Activity duration: 6 h Dose: 0, 300, 1000, 3000 ppm Frequency of Treatment: 5 days/week

NOAEL: 3,000 ppm Method: OECD Test Guideline 453

Result: did not display carcinogenic properties Symptoms: No tumors GLP: yes Test substance: Information given is based on data obtained from similar substances. Carcinogenicity - Assessment: Carcinogenicity classification not possible from current data.

Reproductive toxicity

Fertility classification not possible from current data. Embryotoxicity classification not possible from current data.

STOT - single exposure :No data available **STOT - repeated exposure** :No data available

Repeated dose toxicity

Species: rat, male and female NOAEL: 1,000 mg/kg Application Route: Oral

Exposure time: 4 wk Number of exposures: daily Dose: 0, 40, 200, 1000 mg/kg GLP: yes

Aspiration toxicity: No aspiration toxicity classification

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SECTION 12 : ECOLOGICAL INFORMATION

Exotoxicological Information (for the blended product): No data found for this product.

Exotoxicological Information (for diethanolamine):

Movement & Partitioning: Bioconcentration potential is low (BCF less than 100 or Log Pow less than 3). Potential for mobility in soil is very high (Koc between 0 and 50).

Persistence and Degradation: Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD greater than 40%). Material is ultimately biodegradable. Reaches more than 70% mineralization in OECD test for inherent biodegradability. Material is readily biodegradable. Passes OECD test (s) for ready biodegradability.

Ecotoxicity: Material is slightly toxic to aquatic organisms on an acute basis (LC50 between 10 and 100 mg/L in most sensitive species).

Exotoxicological Information (as Na4EDTA):

Ecotoxicity effects

Toxicity to fish: LC50: > 100 mg/l Exposure time: 96 hSpecies: Fish

Toxicity to daphnia and other

aquatic invertebrates: EC50: > 500 mg/l Exposure time: 24 h Species: Daphnia magna (Water flea)

Toxicity to algae: EC50: > 100 mg/l Exposure time: 72 h Species: algae

Elimination information (persistence and degradability)

Bioaccumulation: No data available

Mobility: No data available

Biodegradability: Result: Not readily biodegradable. Biochemical Oxygen Demand (BOD): No data available

Exotoxicological Information (for Dipropylene glycol monomethyl ether) : Ecotoxicity

-Toxicity to fish: LC50 (Pimephales promelas (fathead minnow)): 4,998 mg/l Exposure time: 96 h

-Toxicity to daphnia and other aquatic invertebrates: LC50 (Daphnia magna (Water flea)): 1,919 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202 GLP: no

-Toxicity to algae : EC50 (Pseudokirchneriella subcapitata): > 100 mg/l End point: Growth rate

Exposure time: 72 h Test Type: static test Analytical monitoring: yes

Method: OECD Test Guideline 201 GLP: yes Remarks: No toxicity at the limit of solubility

Persistence and degradability

Biodegradability: aerobic Inoculum: Activated sludge, domestic, adaption not specified

Concentration: 79.5 mg/l Result: Readily biodegradable. Biodegradation: 76 %

Exposure time: 28 d Method: OECD Test Guideline 301F GLP: yes

Bioaccumulative potential

Partition coefficient: noctanol/water: log Pow: -0.06 (20 °C)

Mobility in soil No data available

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances. Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

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SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Recycle, recovery and reuse of materials, where permitted, is encouraged as an alternate to disposal as a waste. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA listed hazardous waste or has any of the four RCRA hazardous waste characteristics. Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA listed hazardous waste. RCRA Hazardous Waste Characteristics: There are four characteristics defined in 40 CFR Section 261.21-61.24: *Ignitability, Corrosivity, Reactivity, and Toxicity.* To determine Ignitability, see Section 9 of this SDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 2 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed.

Is the unused product a RCRA hazardous waste (40CFR261.33) if discarded? No If yes, the RCRA ID number is : N/A

SECTION 14: TRANSPORTATION INFORMATION

Transportation Emergency Telephone Number: 3E 24 hour number: (866)302-6855* *Please refer to c# referenced in section 1 of this sds.

UN Number / DOT Proper Shipping Name / DOT Hazard Class /Packing Group / DOT Label & other information: NOT REGULATED BY DOT (mildly alkaline cleaning liquid NOIBN)

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS:

TSCA (Toxic Substances Control Act) Status : The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4(a):

ComponentRQ (lbs)Diethanolamine100

Spills or releases resulting in the loss of any ingredient at or above its RQ requires immediate notification to the National Response Center (800) 424-8802 and to your Local Emergency Planning Committee.

SARA 302 Components - 40 CFR 355 Appendix A Section 302 Component(s) TPQ (lbs) RQ (lbs)

none

SARA 311/312 Classification - 40 CFR 370.2:

(as Diethanolamine) Immediate Hazard, Delayed Hazard

(as Na4 Ethylenediaminetetraacetate) Acute Health Hazard, Chronic Health Hazard

(as Dipropylene glycol monomethyl ether): Fire Hazard

SARA 313 Components - 40 CFR 372.65:

Section 313 Component(s) CAS # %
Diethanolamine 111-42-2 1 - 5

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INTERNATIONAL REGULATIONS:

Diethanolamine (CAS# 111-42-2) is listed on the following inventories: Australian Inventory of Chemical Substances (AICS), Canada Domestic Substances List (DSL), Inventory of Existing Chemical Substances in China (IECSC), European Inventory of Existing Commercial Chemical Substances (EINECS), Korea Existing Chemicals List (ECL), New Zealand Inventory, Philippine Inventory of Chemicals and Chemical Substances (PICCS),

Na4EDTA (CAS#64-02-8) is listed on the following inventories, or is in compliance with the following inventories: CH INV (Switzerland. New notified substances and declared preparations), DSL (Canadian Domestic Substances List), AICS (Australia Inventory of Chemical Substances), ENCS (Japan - Existing and New Chemical Substances Inventory), ISHL (Japan - Inventory of Chemical Substances), KECI (Korean Existing Chemicals Inventory), PICCS (Philippines Inventory of Chemicals and Chemical Substances), IECSC (Inventory of Existing Chemical Substances in China)

Dipropylene glycol monomethyl ether (CAS#34590-94-8) is listed on the following inventories: Canadian Domestic Substances List (DSL), EU. EINECS, Australia Inventory of Chemical Substances (AICS), Japan. ENCS - Existing and New Chemical Substances Inventory, Korea. Korean Existing Chemicals Inventory (KECI), China. Inventory of Existing Chemical Substances in China (IECSC), Philippines Inventory of Chemicals and Chemical Substances (PICCS), New Zealand. Inventory of Chemical Substances

STATE REGULATIONS:

California Safe Drinking Water Act (Prop. 65) Listing: None listed.

Other Regulations / Legislation which apply to this product:

Diethanolamine (CAS# 111-42-2) is listed on the following inventories: New Jersey Community RTK (EHS Survey), Pennsylvania RTK - Hazardous Substances, Massachusetts RTK - Substance List, Rhode Island RTK

Na4EDTA (CAS#64-02-8) is listed on the following inventories: Pennsylvania Right To Know, New Jersey Right To Know

Dipropylene glycol monomethyl ether (CAS#34590-94-8) is listed on the following inventories: Massachusetts Right To Know, Pennsylvania Right To Know, New Jersey Right To Know

SECTION 16: OTHER INFORMATION

NFPA Rating: HEALTH: 2 FLAMMABILITY: 0 REACTIVITY: 0

NFPA hazard degree designation 704: 4 = extreme, 3 = high, 2 = moderate, 1 = slight, 0 = none.

Revision Date: 2/24/2016

Information and data compiled to compose this SDS is correct to the best of our knowledge as of the printed date, and is offered solely for your consideration, investigation, and verification.