Vibra Glo R-501

SECTION 1. IDENTIFICATION

Product Identifier	Vibra Glo R-501
Other Means of Identification	Rust Inhibitor Compound
Product Family	Inhibitor
Recommended Use	Rust Inhibitor.
Restrictions on Use	None known.
Manufacturer/Supplier Identifier	Vibra Finish Ltd, 5329 Maingate Drive, Mississauga, ON, L4W 1G6, Canada, Cherryl Mejia-Fermin, (905) 625-9955 Ext. 252 , https://vibra.com/
Emergency Phone No.	Vibra Finish, 905-625-9955, Business Hours: Monday - Friday, 7 am - 3 pm

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015).

Classification

Oxidizing liquid - Category 3; Acute toxicity (Oral) - Category 4; Eye irritation - Category 2A; Carcinogenicity - Category 2; Aquatic hazard (Acute) - Category 2; Aquatic hazard (Chronic) - Category 2

Label Elements

Signal Word:
Warning
Hazard Statement(s):
H272 May intensify fire; oxidizer.
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.
H411 Toxic to aquatic life with long lasting effects.
Precautionary Statement(s):
Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220 Keep or store away from clothing and other combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P264 Wash hands and skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
Response:
P301 + P312 IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308 + P313 IF exposed or concerned: Get medical advice or attention.
P330 Rinse mouth.
P337 + P313 If eye irritation persists: Get medical advice or attention.
P391 Collect spillage.
Storage:
P405 Store locked up.
Disposal:
P501 Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Triethanolamine	102-71-6	10-20	TEA	
Sodium nitrite	7632-00-0	5-10	NDA	
Diethanolamine	111-42-2	1-5	DEA	
Alcohols, C12-15, ethoxylated propoxylated, liquids	68551-13-3	<1		

Notes

Concentrations are expressed in % weight/volume.

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. Get medical advice or attention if you feel unwell or are concerned.

Skin Contact

Avoid direct contact. Wear chemical protective clothing if necessary. Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Quickly and gently blot or brush away excess chemical. Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. Get medical advice or attention if you feel unwell or are concerned. If skin irritation occurs, get medical advice or attention. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

Eye Contact

Avoid direct contact. Wear chemical protective gloves if necessary. Quickly and gently blot or brush chemical off the face. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) 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. If eye irritation persists, get medical advice or attention.

Ingestion

Rinse mouth with water. Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. If vomiting occurs naturally, lie on your side in the recovery position. Rinse mouth with water again. Immediately call a Poison Centre or doctor.

First-aid Comments

Get medical advice or attention if you feel unwell or are concerned. Some of the first-aid procedures recommended here require advanced first-aid training.

Most Important Symptoms and Effects, Acute and Delayed

Refer to “Section 11: Toxicological Information”.
Ingestion may cause methemoglobinemia. Initial manifestation of methemoglobinemia is cyanosis, characterized by navy lips, tongue and mucus membranes, with skin colour being slate grey. Further manifestation is characterized by headache, weakness, dyspnea, dizziness, stupor, respiratory distress and death due to anoxia. If ingested, nitrates may be reduced to nitrites by bacteria in the digestive tract. Signs and symptoms of nitrite poisoning include methemoglobinemia, nausea, dizziness, increased heart rate, hypotension, fainting and, possibly shock.

Immediate Medical Attention and Special Treatment

Target Organs

Blood.

Special Instructions

If medical advice is needed, have product container at hand. Consideration should be given to the possibility that over-exposure to materials other than this product may have occurred.
(Sodium nitrite)

Medical Conditions Aggravated by Exposure

None known.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

Does not burn.
Corrosive, oxidizing nitrogen oxides.

Special Protective Equipment and Precautions for Fire-fighters

Evacuate area. Fight fire from a safe distance or a protected location. Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours or gases. Do NOT apply water directly to spill. Knock down vapours or gases with water fog or fine water spray.
Before entry, especially into confined areas, use an appropriate monitor to check for: toxic gases or vapours. Oxidizer. Prevent contact with flammable and combustible materials. Dike and recover contaminated water for appropriate disposal. Review Section 6 (Accidental Release Measures) for important information on responding to leaks/spills. Fire-fighters should enter area wearing specialized protective equipment. (Bunker Gear will not provide adequate protection.)
A full-body encapsulating chemical protective suit with positive pressure SCBA may be necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Remove or isolate incompatible materials as well as other hazardous materials.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas. Minimize the use of water to prevent environmental contamination.

Methods and Materials for Containment and Cleaning Up

Review Section 7 (Handling) of this safety data sheet before proceeding with clean-up.
Small spills or leaks: stop or reduce leak if safe to do so. Contain and soak up spill with absorbent that does not react with spilled product. Do not use absorbents. Contain spill using noncombustible material such as vermiculite, earth or sand. Cover the spill surface with the appropriate type of foam to reduce the release of vapour. Place used absorbent

into suitable, covered, labelled containers for disposal. Contaminated absorbent poses the same hazard as the spilled product.
Large spills or leaks: dike spilled product to prevent runoff. Knock down vapour with fog or fine water spray. Do not direct water at spill or source. Remove or recover liquid using pumps or vacuum equipment. Flush spill area. Dike and recover contaminated water for appropriate disposal. If spills occur on wooden floor or other combustible material, flush with large quantities of water. Get expert advice before treating the spilled product with other chemicals to make it less hazardous. Do not return spilled product to its original container.
Store recovered product in suitable containers that are: tightly-covered. Review Section 13 (Disposal Considerations) of this safety data sheet. Contact emergency services and manufacturer/supplier for advice.

Other Information

Report spills to local health, safety and environmental authorities, as required. Contact supplier, local fire and emergency services for help.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid breathing in this product. Do not get in eyes, on skin or on clothing. Do not swallow. Only use where there is adequate ventilation. Avoid generating vapours or mists. Prevent uncontrolled release of product. Avoid release to the environment. Immediately report leaks, spills or failures of the safety equipment (e.g. ventilation system). In the event of a spill or leak, exit the area immediately. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. If product is transferred to another container, ensure new container is suitable for the product. Prevent accidental contact with incompatible chemicals. Wear personal protective equipment to avoid direct contact with this chemical. Prevent contamination of surfaces that unprotected personnel may use. Prevent accidental contact with flammable and combustible materials. Keep containers tightly closed when not in use or empty. Never reuse empty containers, even if they appear to be clean. General hygiene considerations: it is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling. Do NOT smoke in work areas. Do NOT eat, drink or store food in work areas. Remove contaminated clothing and protective equipment before entering eating areas or leaving work area. Wash hands thoroughly after handling this product and before eating, using the washroom or leaving work area. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely. See Section 13 (Disposal Considerations) of this safety data sheet.

Conditions for Safe Storage

Store in an area that is: cool, dry, well-ventilated, separate from incompatible materials (see Section 10: Stability and Reactivity). Engineering controls are usually required in the storage area to protect against the product's hazard(s). Review Section 8 (Exposure Controls/Personal Protection) for information.
Store in the original, labelled, shipping container. Protect from conditions listed in Conditions to Avoid in Section 10 (Stability and Reactivity). Empty containers may contain hazardous residue. Store separately. Keep closed. Follow all precautions given on this safety data sheet. Comply with all applicable health and safety regulations, fire and building codes.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Not available.

Triethanolamine - ACGIH TLV TWA = 5
Diethanolamine - ACGIH TLV TWA = 2

Appropriate Engineering Controls

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air.
Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.
Suitable materials are: neoprene rubber, nitrile rubber, polyvinyl chloride.

Respiratory Protection

Wear a NIOSH approved air-purifying respirator with N100, R100, or P100 filter(s).

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Clear colourless liquid.
Odour	Odourless
Odour Threshold	Not available
pH	9.0
Melting Point/Freezing Point	Not applicable (melting); Not available (freezing)
Initial Boiling Point/Range	212 ºF (100 ºC)
Flash Point	Not applicable
Evaporation Rate	Not available
Flammability (solid, gas)	Not available
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	1.07
Solubility	Soluble in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)

Other Information

Physical State	Liquid

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None known.

Conditions to Avoid

Heat. Open flames, sparks, static discharge, heat and other ignition sources. Freezing. Incompatible materials.

Incompatible Materials

Organic acids (e.g. acetic acid), ammonia, strong acids (e.g. hydrochloric acid), strong bases (e.g. sodium hydroxide), halogens (e.g. chlorine).

Hazardous Decomposition Products

Corrosive, oxidizing nitrogen oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Information presented below is for the entire product, unless otherwise specified.

Likely Routes of Exposure

Skin contact; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Sodium nitrite	Not available	158 mg/kg (rat)	Not available
Triethanolamine	4.6 mg/L (rat) (4-hour exposure)	1320 mg/kg (rat)	1000 mg/kg (rabbit)
Diethanolamine	4.6 mg/L (rat) (4-hour exposure)	1320 mg/kg (rat)	1000 mg/kg (rabbit)

Inhalation, Rat = 5.5 mg/4 hr (Sodium Nitrite)

Oral Rabbit = 186 mg/Kg (Sodium Nitrite)

Skin Corrosion/Irritation

Animal tests show mild irritation. (Immediate Effect).

Serious Eye Damage/Irritation

Animal tests show serious eye irritation. Symptoms include sore, red eyes, and tearing. (Immediate Effect).

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

No data available.

Skin Absorption

Not available.

Ingestion

May cause irritation of the mouth, throat and stomach. Symptoms may include nausea, vomiting, stomach cramps and diarrhea. Toxic if swallowed. (Immediate Effect).

Aspiration Hazard

Not available.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Not available.

Respiratory and/or Skin Sensitization

Not known to be a skin sensitizer.

Carcinogenicity

IARC: Group 2B – Possibly carcinogenic to humans. (Diethanolamine)
Note: Amines may react with nitrites to form nitrosamines. Some nitrosamines have been shown to be carcinogenic in laboratory animals.

Key to Abbreviations

IARC = International Agency for Research on Cancer.

Reproductive Toxicity

Development of Offspring

Not known to harm the unborn child.

Sexual Function and Fertility

Not known to cause effects on sexual function or fertility.

Effects on or via Lactation

Not known to cause effects on or via lactation.

Germ Cell Mutagenicity

Not known to be a mutagen.

Interactive Effects

Not applicable.

Other Information

The product has not been tested. The statements on toxicology have been derived from products of as similar structure and composition.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic, with long lasting effects to aquatic life,. (Sodium nitrite)
LC50 Fish 1: 0.19 mg/L (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through]) (Sodium Nitrite)
LC50 Fish 2: 0.092 - 0.13 mg/L (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through]) (Sodium Nitrite)

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Triethanolamine	100-220 mg/L (Pimephales promelas (fathead minnow); 96-hour; static)	83.6 mg/L (Daphnia magna (water flea); 48-hour)	Not available	30 mg/L (Desmodesmus subspicatus (algae); 72-hour)
Diethanolamine	100-220 mg/L (Pimephales promelas (fathead minnow); 96-hour; static)	83.6 mg/L (Daphnia magna (water flea); 48-hour)	Not available	30 mg/L (Desmodesmus subspicatus (algae); 72-hour)

Persistence and Degradability

No ingredient of this product or its degradation products is known to be highly persistent. Degrades rapidly based on quantitative tests.

Bioaccumulative Potential

This product and its degradation products are not expected to bioaccumulate.

Mobility in Soil

If released into the environment, this product can move slowly through the soil.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Recycle and reuse product, if possible. Dispose of contents and container in accordance with local, regional, national and international regulations. Recommended disposal methods are for the product, as sold. (Used material may contain other hazardous contaminants). This product and its container must be disposed of as hazardous waste. Do NOT dump into any sewers, on the ground or into any body of water. Treat waste in an approved waste disposal facility. Empty containers retain product residue. Follow label warnings even if container appears to be empty. Dispose of or recycle empty containers through an approved waste management facility.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	3219	Nitrites, Inorganic, Aqueous Solution (Sodium nitrite)	5.1	III
Canadian TDG	3219	Nitrites, Inorganic, Aqueous Solution (Sodium nitrite)	5.1	III

Environmental Hazards Not applicable

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

This section is not required by WHMIS.

Canada

WHMIS 1988 Classification

Class C Class D1B Class D2A

C - Oxidizer; D1B - Toxic; D2A - Very Toxic (Carcinogenicity)

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

Sodium Nitrite listed on TSCA Inventory of Chemical Substances.

Additional USA Regulatory Lists

CERCLA. (Sodium nitrite). (Diethanolamine) SARA Title III - Section 302. (Sodium nitrite) SARA Title III - Section 311/312. (Sodium nitrite). (Triethanolamine). (Diethanolamine) SARA Title III - Section 313. (Sodium nitrite). (Diethanolamine)

SECTION 16. OTHER INFORMATION

NFPA Rating	**Health - 2 Flammability - 0 Instability - 1** **Special Hazard - Oxidizing**
Date of Preparation	October 27, 2018
Date of Last Revision	February 02, 2024
Key to Abbreviations	ACGIH® = American Conference of Governmental Industrial Hygienists AIHA® = AIHA® Guideline Foundation HSDB® = Hazardous Substances Data Bank IARC = International Agency for Research on Cancer NFPA = National Fire Protection Association NIOSH = National Institute for Occupational Safety and Health NTP = National Toxicology Program OSHA = US Occupational Safety and Health Administration RTECS® = Registry of Toxic Effects of Chemical Substances
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