

SAFETY DATA SHEET

NAME OF PRODUCT Vogel's 50X Salt Solution

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product/Catalog Number(s):

26-644

Product name: Vogel's 20X Salt Solution

Synonyms: 20X VBE

Manufacturer: Molecular Toxicology Inc.

Address: 157 Industrial Park Drive, Boone, North Carolina, 28607

Phone: (1) 828 264 9099 (8:30 – 17:00 EST)

Fax: 828 264 0103

Emergency contact (Chemtrec): Contact 1800-424-9300 (USA) or 703 527 3887 (International) at other times
Email: chemtrec@chemtrec.com; <http://www.chemtrec.com/>

Recommended use: Laboratory, For Research Only

Restrictions on use: Not for clinical use

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture per GSH and EU Directive 1272/2008



Warning

Health hazards Eye irritation (Category 2A)

See eco-toxicity section 12.

Environmental hazards

Hazard Statements H319 Causes serious eye irritation.

Precautionary Statements P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ eye protection/ face protection.
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 In eye irritation persists: Get medical advice/attention.

Hazards not otherwise classified or not covered by GHS None

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Substances:

Component	Purpose	CAS-No	EC-No.	Weight %
Citric Acid, monohydrate	Nutrient component of 50X VBE	5949-29-1	201-069-1	4%

SECTION 4. FIRST AID MEASURES

Description of first aid measures

General	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes. Consult a doctor.
Skin Contact	Wash off with soap and plenty of water.
Ingestion	Rinse mouth with plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
Inhalation	Move to fresh air. If required, provide artificial respiration. Consult a physician.
Protection of first-aiders	Not required

In the event that symptoms develop or persists, obtain medical attention.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in Section 2 and/or Section 11.

Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media

Use water spray, alcohol resistant foam, carbon dioxide, or dry chemical.

Special hazards arising from the substance or mixture

Hazardous thermal decomposition products: Carbon oxides

Advice for firefighters

Fire-fighters should wear self-contained breathing apparatus (SCBA).

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Environmental precautions

Do not release material into drains.

Methods and material for containment and cleaning up

Soak up with an inert, absorbent material and dispose of as hazardous waste. Dispose contaminated material as waste according to section 13. Keep in suitable, closed containers for disposal.

Reference to other sections

Refer to Sections 7 for information on safe handling

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor and mist. Keep away from heat and sources of ignition.

Conditions for safe storage, including any incompatibilities

Store according to product packaging, tightly sealed. Keep in a dry, well-ventilated place. Container(s) which are opened must be carefully sealed and held upright to prevent leakage.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Exposure controls

Engineering Measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

Personal protective equipment

Eye Protection: Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hand Protection

Chemical resistant gloves. Inspect gloves before use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with the product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

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Skin and body protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hygiene Measures - Handle in accordance with good industrial hygiene and safety practice. Wash hands, forearms and face thoroughly after handling chemical products, before smoking, eating and using lavatory, and at the end of the work period. Employ techniques to avoid contamination of clothing. Keep away from food, beverages, and feed.

Environmental exposure controls –Do not let product enter drains.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid, clear
Auto-ignition temperature	no data available
Boiling point	no data available
Decomposition temperature	no data available
Evaporation Rate	no data available
Flammable limits in air	no data available
Flash point	no data available
Formula	N/A
Melting point	No data available
Molecular weight	N/A
Odor threshold	no data available
Osmolality	no data available
Partition coefficient	no data available
pH	no data available
Solubility in water	Yes
Specific gravity	no data available
Vapor density	no data available
Vapor pressure	no data available
Viscosity	no data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under normal conditions. Decomposition will not occur if used and stored appropriately.

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Possibility of hazardous reactions

No hazardous reactions known.

Conditions to avoid

No data available

Incompatible materials

No data available

Hazardous decomposition products

Carbon monoxide, carbon dioxide

Other decomposition products – No data available

In the event of fire: See Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects**Acute toxicity**

No data available

Other information on acute toxicity

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probably, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as probably, possible or confirmed human carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

Teratogenicity

No data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

No data available

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Specific target organ toxicity - repeated exposure (Globally Harmonized System)

No data available

Aspiration hazard

No data available

Potential health effects

Gastrointestinal disturbance (vomiting, diarrhea), damage to tooth enamel, dermatitis

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects

No data available

Additional toxicological information:

RTECS: GE7810000

SECTION 12. ECOLOGICAL INFORMATION

Aquatic ecotoxicity:

No data available

Persistence and degradability: No data available.

Behavior in environment systems: No further relevant information available.

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Additional ecological information:

General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course, or sewage system.
Harmful to aquatic life.

Results of PBT and vPVB Assessment

PBT: Not applicable

vPvB: Not applicable

Other adverse effects: No further relevant information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

DOT (US):

Not dangerous goods

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IATA

Not dangerous goods

IMDG:

Not dangerous goods

SECTION 15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard (citric acid, monohydrate))

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

No components are subject to the Pennsylvania Right to Know Act.

New Jersey Right To Know Components

No components are subject to the New Jersey Right to Know Act.

California Prop. 65 Components

This product does not contain a chemical known to the State of California to cause cancer, birth defects, and other reproductive harm.

SECTION 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Molecular Toxicology, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See www.moltox.com and/or the invoice or packing slip for additional terms and conditions of sale.