



SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Manufacturer: Ver-tech Solutions & Service 6801 Bleck Drive Rockford, MN 55373 763-577-4050	Product Name: Glass Clean Concentrate Product Code: VSS196 Recommended Use: Glass cleaner Revision Date: 5/19/2015
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Chemical Emergency: Infotrac: 1-800-535-5053

SECTION 2: HAZARDS IDENTIFICATION

GHS Hazard Classification

Flammable Liquid	Category 3
Skin Irritant	Category 2
Serious Eye Damage	Category 1
Specific Target Organ Toxicity (Single Exposure)	Category 3

Signal Word

DANGER!



Hazard Statements

Flammable liquid and vapor
 Causes skin irritation
 Causes serious eye damage
 May cause respiratory irritation.

Precautionary Statements - Prevention

Keep away from heat/sparks/open flames/hot surfaces – No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof electrical/ventilating/lighting equipment
 Keep only in original container
 Use only non-sparking tools
 Take precautionary measures against static discharge
 Wear eye protection and protective gloves
 Wash thoroughly after handling
 Avoid breathing mists and vapors
 Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish
 IF ON SKIN (or hair): Remove all contaminated clothing. Rinse skin with water/shower
 If skin irritation occurs: Get medical advice/attention
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
 If eye irritation persists: Get medical advice/attention
 Call a POISON CENTER or doctor/physician if you feel unwell
 If inhaled: Remove person to fresh air and keep comfortable for breathing

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool
 Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

SECTION 3: INFORMATION ON HAZARDOUS INGREDIENTS

Product is a mixture according to 29 CFR 1910.1200.

Hazardous Components

Hazardous Ingredients	Cas #	Weight %
Isopropyl alcohol	67-63-0	21.5%

2-butoxyethanol	111-76-2	< 4%
Ammonium hydroxide	1336-21-6	< 2%
Proprietary Blend	Trade Secret	< 5%

Specific chemical identity and/or exact percentage of components has been withheld in accordance with a trade secret claim according to Appendix E 29 CFR 1910.1200.

SECTION 4: FIRST-AID MEASURES

First Aid Measures

- General Advice:** Harmful or fatal if swallowed. Wear eye protection when handling this product. Keep out of reach of children. Use with care.
- Eye Contact:** Immediately flush with cool running water for at least 15 minutes while holding eyelids apart. Do not rub affected area. Remove contact lenses if applicable.
- Skin Contact:** Wash off immediately with soap and water while removing all contaminated clothes and shoes.
- Ingestion:** If swallowed, call immediately for emergency medical assistance. DO NOT induce vomiting. Rinse mouth with water and drink 1-2 glasses of water. Never give anything by mouth to an unconscious person.
- Inhalation:** Remove to fresh air.

Most Important Symptoms and Effects

- Symptoms:** Severe burns to eyes. Skin and respiratory irritant.

Indication of any immediate medical attention and special treatment needed

- Note to Physician:** Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Flammable Properties

- Flammability:** Considered to be a fire hazard
- Explosive Prop:** No information available.

Extinguishing Media

- Suitable:** In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
- Unsuitable:** Water may be ineffective.

Specific Hazards Arising from Chemical

- Hazards:** Thermal decomposition may lead to release of irritating vapors. In the event of fire and/or explosion do not breathe fumes.

Protective equipment and precautions for fire-fighters

- Fire-Fight Method:** In the event of a fire, fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- Personal Precautions:** Evacuate personnel to safe areas. Isolate hazard area and deny entry. Stay upwind of spill/leak. Use personal protective equipment. Avoid contact with skin, eyes or clothing.
- Environ. Precautions:** Prevent release to the environment if possible. Dike large spills to prevent material from entering streams or sewer systems.
- Clean-Up Method:** Soak-up with inert absorbent material and place into appropriate container for disposal. Clean contaminated area thoroughly with water. Prevent product from entering drains.

SECTION 7: HANDLING AND STORAGE

- Handling:** Use personal protective equipment when needed. Avoid contact with skin, eyes, and clothing. Wash hands before eating, drinking, or smoking. Remove contaminated clothes and wash before reuse. Use in a ventilated area.
- Storage:** Store in closed containers in cool, dry, well-ventilated area. Avoid overheating or freezing. Keep in properly labeled containers and out of reach of children.
- Incomp. Materials:** Strong acids and bases. Oxidizing agents. Reducing agents. Amines, Ammonia. Ethylene oxide. Chlorine.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION**Exposure Guidelines**

Hazardous Chemical	TLV - TWA	TLV - STEL
Isopropyl alcohol	400 ppm	400 ppm
2-butoxyethanol	50 ppm	20 ppm
Ammonium hydroxide	No information available	No information available
Proprietary Blend	No information available	No information available

Appropriate Engineering Controls

Eng. Controls: Ensure adequate ventilation, especially in confined areas.

Personal Protection Equipment (PPE)

Eyes: Recommend safety goggles or shield.

Respiratory: Not usually necessary where ventilation is sufficient to maintain vapors under the TLV limit.

Skin: Avoid skin contact. Recommend chemical resistant gloves.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical State:	Liquid	Freezing Point:	Not determined
Appearance:	Blue liquid	Boiling Point:	Not determined
Color:	Blue	Evaporation Rate:	Not determined
Odor:	Alcohol-like	Vapor Pressure:	Not determined
Odor Threshold:	Not determined	Vapor Density:	Not determined
pH:	11.0	Relative Density:	Not determined
Flash Point:	82.2° F, closed cup	Flammability:	Not determined
Water Solubility:	Soluble in water	Explosive Limits:	Not determined
Viscosity:	Not determined	Part. Coefficient:	Not determined
Specific Gravity:	0.96	Auto-ignition Temp:	Not determined
Melting Point:	Not determined	Decomp. Temp:	Not determined

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable under ordinary conditions of use and storage.

Haz. Decomposition: Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Haz. Polymerization: No information available.

Incompatibilities: Strong acids and bases. Oxidizing agents. Reducing agents. Amines, Ammonia. Ethylene oxide. Chlorine.

Conditions to Avoid: Heat, moisture and incompatibles.

SECTION 11: TOXICOLOGY INFORMATION**Component Information**

Hazardous Chemical	LD50 Oral	LD50 Dermal
Isopropyl alcohol	5000 mg/kg (rat)	12800 mg/kg (rabbit)
2-butoxyethanol	1300 mg/kg (rat)	> 2000 mg/kg (rat)
Ammonium hydroxide	350 mg/kg (rat)	No information available
Proprietary Blend	No information available	No information available

Potential Health Effects

Exposure Routes: Eye Contact, Dermal Contact, Ingestion, Inhalation

Acute Toxicity:

Eyes: Causes eye irritation with tearing, redness, and impaired vision.

Skin: Causes skin irritation, redness, and itching. May cause chemical burns.

Ingestion: Harmful if swallowed. Corrosive to mucous membranes, esophagus and stomach.

Inhalation: Respiratory irritant.

Chronic Effects: Avoid repeated exposure. May aggravate pre-existing medical conditions including eye, skin and respiratory disorders.

Carcinogenicity: Not classifiable as a human carcinogen by OSHA, NTP or IARC.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Hazardous Chemical	Toxicity to Fish	Toxicity to Invertebrates
Isopropyl alcohol	1000 ppm (96 h: fathead minnow)	1000 ppm (96 h: Daphnia)
2-butoxyethanol	1474 mg/l (96 h: Oncorhynchus mykiss)	1500 mg/l (48 h: water flea)
Ammonium hydroxide	No information available	No information available
Proprietary Blend	No information available	No information available

Environmental Toxicity

Biodegradation: No information available.
Persistence: No information available.
Bioaccumulation: No information available.
Mobility: No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Recover or recycle if possible. Disposal should be in compliance with applicable federal, state, and local regulations. Do not dispose of in the environment, in sewage, and/or in drains.

Container: Drain contaminated container thoroughly. Triple rinse containers.

SECTION 14: TRANSPORT INFORMATION

Transport in accordance with all federal, state, and local regulations.

DOT

Proper Name: Flammable liquid, n.o.s. (Isopropyl alcohol)

Hazard Class: 3

UN Number: UN1993

Packing Group: III

Special Provisions: 173.150 Exceptions for Class 3: Limited quantities (b)(3) For flammable liquids in Packing Group III and combustible liquids, inner packaging not over 5.0 L (1.3 gallons) net capacity each, packed in a strong outer packaging.
Applicable for VSS196.01

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

TSCA Status: All components of this product are listed or exempt from listing on TSCA inventory.

CERCLA Reportable Quantity: Ammonium hydroxide, 1000 lbs.

Section 311/312 Hazard Category

Acute Health Hazard: Yes

Chronic Health Hazard: Yes

Fire Hazard: Yes

Sudden Release of Pressure: No

Reactive Hazard: No

Section 313 Toxic Chemicals Yes

SECTION 16: OTHER INFORMATION

Prepared by: Health and Safety Department

Contact Number: 763-577-4050

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Revision Note: MSDS converted to GHS compliant SDS format

Version: 1

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End of Safety Data Sheet