

BSI-102 Glass Cleaner

Section 1**Product Description**

Product Name:	BSI-102 Glass Cleaner
Recommended Uses:	Windows or Glass
Synonyms:	Window Cleaner
Distributor:	Best Sanitizers, Inc. PO Box 1360 Penn Valley, CA 95946
Chemical Information Emergency: Chemtrec	1.800.424.9300

Section 2**Hazard Identification****OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation	Category 2
Flammable liquids	Category 3

Warning**Hazard Statements**

Causes serious eye irritation
Flammable liquid and vapor
Appearance—Aqueous solution
Physical State—Liquid
Odor—Mild

Precautionary Statements—Prevention

Wash face, hands and any exposed skin thoroughly after handling.
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.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements—Response

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.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin (hair) with water/shower.
In case of fire: Use CO₂, dry chemical, or foam for extinction.

Precautionary Statements—Storage

Store in a well-ventilated place. Keep Cool.

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Precautionary Statements—Disposal

Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)

Not Applicable

Other Information

*Causes mild skin irritation.

Section 3

Composition/Information on Ingredients

Chemical Name	CAS No.	Weight-%
Water	7732-18-5	72-80
Isopropyl alcohol	67-63-0	10-17
Propylene glycol n-butyl ether	5131-66-8	6-11
Trade Secret 1	Proprietary	0.5-0.9
Trade Secret 3	Proprietary	0.1-0.5
Trade Secret 2	Proprietary	0.3-0.6
Trade Secret 4	Proprietary	0.1-0.3
2-Aminoethanol	141-43-5	0.3-0.9
Ethylenediaminetetraacetic acid tetrasodium salt	64-02-8	0.05-0.15

*The exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4

First Aid Measures

First Aid Measures

Eye Contact

Hold eye(s) open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye(s). Seek medical advice/attention.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing and shoes before reuse. Get medical attention if irritation develops and persists.

Inhalation

Remove to fresh air. Immediate medical attention is not required. Consult a physician if necessary.

Ingestion

Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician immediately.

Most important symptoms and effects, both acute and delayed

Symptoms

See Section 11 for symptom information.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

Section 5

Fire-Fighting Measures

Suitable Extinguishing Media

Dry Chemical. Water spray (fog), Carbon dioxide (CO₂), Foam.

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Unsuitable Extinguishing Media

No Information available.

Specific hazards arising from the chemical

Flammable. Vapors may travel to source of ignition and flash back.

Hazardous combustion products

Carbon Monoxide. Carbon Dioxide (CO₂).

Explosion Data

Sensitivity to Mechanical Impact

None

Sensitivity to Static Discharge

May be ignited by friction, heat, sparks or flames.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers with flooding quantities of water until well after fire is out.

Section 6

Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions

Use personal protection recommended in Section 8. Ensure adequate ventilation, especially in confined areas.

For emergency responders

Isolate area. Keep unnecessary personnel away.

Environment Precautions

Environmental Precautions

Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (See Section 13).

Methods for cleaning up

Use clean non-sparking tools to collect absorbed material. May be ignited by friction, heat, sparks or flames. Collect spillage. Soak up with inert absorbent material,. Sweep up and shovel into suitable containers for disposal. Following product recovery, flush area with water.

Section 7

Handling and Storage

Precautions for Safe Handling

Advice on Safe Handling

Keep away from heat sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Do not eat, drink or smoke when using this product. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Use only in well-ventilated areas. Avoid breathing vapors or mists. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep from freezing. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

Incompatible materials

Heat, sparks, open flame, other ignition sources. Reacts violently with strong oxidants such as nitric acid and silver nitrate causing fire and explosion hazard. Reacts slowly with calcium hypochlorite and ammonia causing fire and explosion hazard.

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Section 8

Protection Information

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl Alcohol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm 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
2-Aminoethanol 141-43-5	STEL: 6 ppm TWA: 3 ppm	TWA: 3 ppm TWA: 6 mg/m ³ (vacated) STEL: 6 ppm (vacated) STEL: 15 mg/m ³	IDLH: 30 ppm TWA: 3 ppm TWA: 8 mg/m ³ STEL: 6 ppm STEL: 15 mg/m ³

Appropriate Engineering Controls

Engineering Controls Showers, eyewash stations, ventilation system.

Individual Protection Measures, such as personal protective equipment

Eye/Face protection	Wear safety glasses with side shields (or goggles).
Skin and body protection	Wear protective Neoprene™ gloves. Rubber gloves. Normal work clothing (long sleeved shirt and long pants) is recommended. Apron recommended.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General Hygiene Considerations	Wash face, hands and any exposed skin thoroughly after handling. Wash contaminated clothing and shoes before reuse. Do not Eat, Drink or Smoke when using this product.

Section 9

Physical and Chemical Properties

Information on basic physical and chemical properties

Formula:	See Section 3	Physical State:	Liquid
Odor:	Mild	Appearance:	Aqueous solution
Odor Threshold:	No Information Available	Color:	Clear Blue
<u>Property</u>	<u>Values</u>	<u>Remarks—Method</u>	
pH	10.5		± 1 @ 21°C
Melting Point/Freezing Point	-9°C / 16°F		
Boiling Point/ Boiling Range	No information available		
Flash Point	~ 33°C / ~ 91°F		
Evaporation rate	No information available		
Flammability (solid, gas)	No information available		

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Flammability Limit in Air

Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure:	No information available
Vapor density:	No information available
Specific Gravity	0.97 g/cc
Water solubility	Completely soluble
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

Section 10

Stability and Reactivity Data

Reactivity	No data available.
Chemical Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Heat, sparks, open flame, other ignition sources. Reacts violently with strong oxidants such as nitric acid and silver nitrate causing fire and explosion hazard. Reacts slowly with calcium, hypochlorite and ammonia causing fire and explosion hazard.
Hazardous Decomposition Products	Carbon monoxide. Carbon dioxide (CO ₂).

Section 11

Toxicity Data

Information on likely routes of exposure

Product Information

Inhalation	Inhalation of vapors in high concentration may cause irritation of respiratory system.
Eye Contact	Irritating to eyes.
Skin Contact	Prolonged contact may cause irritation.
Ingestion	May be harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2-Aminoethanol 141-43-5	= 1720 mg/kg (Rat)	= 1000 mg/kg (Rabbit) = 1 mL/kg (Rabbit)	.
Isopropyl alcohol 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 ppm (Rat) 8 h
Propylene glycol n-butyl ether 5131-66-8	= 5660 µL/kg (Rat) = 1900 mg/kg (Rat)	= 3100 mg/kg (Rabbit)	.
Trade Secret 1	= 1900 mg/kg (Rat)	= 10000 mg/kg (Rabbit)	.
Ethylenediaminetetraacetic acid tetrasodium salt 64-02-8	= 10 g/kg (Rat) = 1658 mg/kg (Rat)	.	.

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Information on toxicological effects

Symptoms	No Information Available
<u>Delayed and immediate effects as well as chronic effects from short and long-term exposure</u>	
Sensitization	No Information Available
Germ cell mutagenicity	No Information Available
Carcinogenicity	The table below lists whether each agency has listed an ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl alcohol 67-63-0	.	Group 3	.	X

Reproductive toxicity	No Information Available
STOT single exposure	No Information Available
STOT repeated exposure	No Information Available
Aspiration hazard	No Information Available

Numerical measures of toxicity –Product Information

The following values are calculated based on Chapter 3.1 of the GHS document mg/kg

Oral LD50	13852 mg/kg
Dermal LD50	16437 mg/kg
Mist	537.80 mg/l

Section 12

Ecological Data

Ecotoxicity

9.50515% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/Aquatic Plants	Fish	Crustacea
Isopropyl alcohol 67-63-0	1000: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50 1000: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	9640: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 11130: 96 h <i>Pimephales promelas</i> mg/L LC50 static 1400000: 96 h <i>Lepomis macrochirus</i> µg/L LC50	13299: 48 h <i>Daphnia magna</i> mg/L EC50
Trade Secret 1	.	37: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 20-40: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 semi-static 24: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static	36: 48 h <i>Daphnia magna</i> mg/L EC50

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Ethylenediaminetetraacetic acid tetrasodium salt 64-02-8	1.01: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	59.8: 96 h <i>Pimephales promelas</i> mg/L LC50 static 41: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static	610: 24 h <i>Daphnia magna</i> mg/L EC50
2-Aminoethanol 141-43-5	75: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	227: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 3684: 96 h <i>Brachydanio rerio</i> mg/L LC static 300-1000: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 200: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 114: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static	65: 48 h <i>Daphnia magna</i> mg/L EC50

Persistence and degradability

No Information Available.

Bioaccumulation

Chemical Name	Partition Coefficient
Isopropyl alcohol 67-63-0	0.05
2-Aminoethanol 141-43-5	-1.91

Mobility

Soluble in water.

Other adverse effects

No information available.

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Section 13

Disposal Information

Waste treatment methods

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Dispose of in accordance with federal, state and local regulations.

Chemical Name	California Hazardous Waste Status
Isopropyl alcohol 67-63-0	Toxic Ignitable

Section 14

Transport Information

DOT

UN/ID No. 1993
Proper shipping name Flammable liquids, n.o.s. (contains isopropanol)
Hazard Class 3
Packing Group III
Emergency Response Guide Number 128

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Section 15

Regulatory Information

International Inventories

TSCA	No information available
DSL/NDSL	No information available
EINECS/ELINCS	No information available

Legend:

TSCA—United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL— Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS—European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372. Note: Isopropyl alcohol only needs to be reported if it is being manufactured by the strong acid process. Facilities that process or otherwise use isopropyl alcohol are NOT covered and should NOT file a report.

Chemical Name	SARA 313 –Threshold values %
Isopropyl alcohol 67-63-0	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substance regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substance regulated as a hazardous substance under the Comprehensive Environment Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local regional or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

Warning! This product may contain trace amounts of Nitrilotriacetic acid, trisodium salt 5064-31-3; Formaldehyde 500-00-0; Ethyl alcohol 64-17-5.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Isopropyl alcohol 67-63-0	X	X	X
2-Aminoethanol 141-43-5	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number

Not Applicable

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Section 16

Additional Information

<u>NFPA</u>	Health Hazards	Flammability	Instability	Physical and Chemical Properties
	1	3	0	None
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal protection
	1	3	0	B (safety glasses, gloves)

Prepared by: Technical Department

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Version 3

Revision Note Annual Review

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates to only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

BSI-102.003SDS