

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Version: 2.0

Date of issue: 02/19/1999 Revision date: 04/24/2020 Supersedes: 09/01/2015

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : GLASS CLEANER CONCENTRATE

Product code : GLAC

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Industrial and Institutional Glass Cleaner Concentrate

1.3. Supplier

Sky Blue Industries, Inc. 760 W. Exchange Road Ogden, Utah 84401 - USA T (800) 998-2808

www.skyblueindustries.com

1.4. Emergency telephone number

Emergency number : Chemtrec 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flam. Liq. 3 H226 Flammable liquid and vapor Skin Irrit. 2 H315 Causes skin irritation Eye Irrit. 2B H320 Causes eye irritation

Full text of hazard classes and H-statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS-US)





Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H226 - Flammable liquid and vapor

H315 - Causes skin irritation H320 - Causes eye irritation

Precautionary statements (GHS-US) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P233 - Keep container tightly closed

P240 - Ground/Bond container and receiving equipment

P241 - Use explosion-proof electrical/ventilating/lighting/... equipment

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge P264 - Wash hands, forearms and face thoroughly after handling

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

P302+P352 - If on skin: Wash with plenty of water/...

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing P321 - Specific treatment (see ... on this label)

P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P370+P378 - In case of fire: Use media other than water to extinguish

P403+P235 - Store in a well-ventilated place. Keep cool

P501 - Dispose of contents/container to ...

2.3. Other hazards which do not result in classification

No additional information available

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2.4. **Unknown acute toxicity (GHS US)**

Not applicable

SECTION 3: Composition/Information on ingredients

Substances 3.1.

Not applicable

3.2. **Mixtures**

Name	Product identifier	%	GHS US classification
butyl glycolether	(CAS-No.) 111-76-2	5 – 20	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Skin Irrit. 2, H315 Eye Irrit. 2B, H320

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

41 **Description of first aid measures**

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact

: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin

irritation occurs: Get medical advice/attention.

First-aid measures after eye contact

: 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.

First-aid measures after ingestion

: Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/injuries after skin contact

Symptoms/injuries after eye contact : Mild eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media

: All extinguishing media allowed. Adapt extinguishing media to the environment. Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Fire hazard

: Flammable liquid and vapor.

: Irritation.

Hazardous decomposition products in case of fire

: Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting

: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures

: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Use personal protective equipment (PPE).

For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Environmental precautions

Avoid release to the environment. See Section 12 for additional Ecological information.

Methods and material for containment and cleaning up

Methods for cleaning up

Take up liquid spill into absorbent material. Take up liquid spill into absorbent material. Scoop absorbed substance into closing containers. Notify authorities if product enters sewers or public waters.

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Other information

: Dispose of contents/container to {0|message=<specify in accordance with local/regional/national/international regulations>|default=...|filter=(_)?DISPOSAL_.+}. Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes. Do not handle until all safety precautions have been read and understood.

Hygiene measures

Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Ground/bond container and receiving equipment.

Storage conditions
Incompatible products

: Store in a well-ventilated place. Keep cool. Keep container tightly closed.

: Strong acids. Strong bases. Strong oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

GLASS CLEANER CONCENTRATE		
No additional information available		
butyl glycolether (111-76-2)		
USA - ACGIH - Occupational Exposure Limits		
Local name	2-Butoxyethanol (EGBE)	
ACGIH TWA (ppm)	20 ppm	
Remark (ACGIH)	Eye & URT irr	
USA - OSHA - Occupational Exposure Limits		
Local name	2-Butoxyethanol	
OSHA PEL (TWA) (mg/m³)	240 mg/m³	
OSHA PEL (TWA) (ppm)	50 ppm	

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Color : dark blue
Odor : Floral

Odor threshold No data available No data available рΗ : Not applicable Melting point Freezing point : No data available Boiling point : No data available Flash point : ≈ 35 °C (estimated) Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Not applicable. Vapor pressure : No data available Relative vapor density at 20 °C : No data available

Relative density 0.96 Specific gravity / density : 8.02 lb/gal Solubility : Soluble in water. Partition coefficient n-octanol/water (Log Pow) No data available : No data available Auto-ignition temperature No data available Decomposition temperature Viscosity, kinematic : No data available Viscosity, dynamic : No data available : No data available **Explosion limits** Explosive properties : No data available Oxidizing properties : No data available

9.2. Other information

VOC content : 22.7 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

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Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

butyl glycolether (111-76-2)		
LD50 oral rat	1746 mg/kg body weight (Rat; Equivalent or similar to OECD 401; Experimental value)	
LD50 dermal rat	> 2000 mg/kg body weight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)	
LD50 dermal rabbit	435 mg/kg body weight (Rabbit; Experimental value; OECD 402: Acute Dermal Toxicity; 435 mg/kg bodyweight; Rabbit; Weight of evidence; Equivalent or similar to OECD 402)	
LC50 inhalation rat (mg/l)	2.17 mg/l/4h (Rat; Experimental value; 2.35 mg/l/4h; Rat; Experimental value)	
LC50 inhalation rat (ppm)	450-486,Rat; Weight of evidence	

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

butyl glycolether (111-76-2)

IARC group 3 - Not classifiable

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated : Not classified

exposure

Aspiration hazard : Not classified
Viscosity, kinematic : No data available

Symptoms/injuries after skin contact : Irritation.

Symptoms/injuries after eye contact : Mild eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse

effects in the environment.

butyl glycolether (111-76-2)	
LC50 fish 1	1474 ppm (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Oncorhynchus mykiss; Static system; Fresh water; Experimental value)
EC50 Daphnia 1	1550 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
ErC50 (algae)	911 mg/l (72 Hr.)
Threshold limit algae 1	911 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)
Threshold limit algae 2	88 mg/l (NOEC; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)

12.2. Persistence and degradability

butyl glycolether (111-76-2)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Photodegradation in the air.
Biochemical oxygen demand (BOD)	0.71 g O₂/g substance
Chemical oxygen demand (COD)	2.2 g O ₂ /g substance
ThOD	2.305 g O₂/g substance
BOD (% of ThOD)	0.31

12.3. Bioaccumulative potential

butyl glycolether (111-76-2)	
Partition coefficient n-octanol/water (Log Pow)	0.81 (Experimental value; BASF test; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

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12.4. **Mobility in soil**

butyl glycolether (111-76-2)	
Surface tension	0.027 N/m (25 °C)

Other adverse effects

No additional information available

SECTION 13: Disposal considerations

Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Dispose of contents/container to ...

Additional information : Flammable vapors may accumulate in the container.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1993 Flammable liquids, n.o.s. (Isopropyl alcohol), 3, III

: UN1993 UN-No.(DOT)

Proper Shipping Name (DOT) : Flammable liquids, n.o.s.

Isopropyl alcohol

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Packing group (DOT) : III - Minor Danger Hazard labels (DOT) : 3 - Flammable liquid



DOT Packaging Non Bulk (49 CFR 173.xxx) : 203

DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Symbols : G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102)

: B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.

B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150 DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

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Emergency Response Guide (ERG) Number : 128

Other information : No supplementary information available.

Transportation of Dangerous Goods

Not applicable

Transport by sea

Transport document description (IMDG) : UN 1993 FLAMMABLE LIQUID, N.O.S., 3, III

UN-No. (IMDG) : 1993

Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, N.O.S.

Class (IMDG) : 3 - Flammable liquids

Packing group (IMDG) : III - substances presenting low danger

Limited quantities (IMDG) : 5 L

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

di(tetramethylammonium)(29H,31H-phthalocyanin- N29,N30,N31,N32)disulfonamide disulfonate, cuprate(2-)complex, derivates	CAS-No. 12222-04-7	< 0.1%
Proprietary Surfactants	CAS-No. Trade Secret	0.1 – 1%
BLUE AGAVE	CAS-No.	1 – 3%

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

ethylene glycol	CAS-No. 107-21-1	< 1%
Isopropyl alcohol	CAS-No. 67-63-0	10 – 20%
butyl glycolether (111-76-2)		
SARA Section 311/312 Hazard Classes Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard		
ethylene glycol (107-21-1)		
Listed on EPA Hazardous Air Pollutant (HAPS)		
CERCLA RQ	5000 lb	

15.2. International regulations

Ethyl alcohol (64-17-5)	
Listed on IARC (International Agency for Research on Cancer)	

15.3. US State regulations



This product can expose you to ethylene glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
butyl glycolether(111-76-2)	U.S New Jersey - Right to Know Hazardous Substance List
ethylene glycol(107-21-1)	U.S New Jersey - Right to Know Hazardous Substance List

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Component	State or local regulations
Isopropyl alcohol(67-63-0)	U.S New Jersey - Right to Know Hazardous Substance List
Ethyl alcohol(64-17-5)	U.S New Jersey - Right to Know Hazardous Substance List
n-Propanol(71-23-8)	U.S New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

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Full text of H-phrases:

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Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Flam. Liq. 3	Flammable liquids Category 3
Flam. Liq. 4	Flammable liquids Category 4
Skin Irrit. 2	Skin corrosion/irritation Category 2
H226	Flammable liquid and vapor
H227	Combustible liquid
H302	Harmful if swallowed
H311	Toxic in contact with skin
H315	Causes skin irritation
H320	Causes eye irritation

SDS US (GHS HazCom 2012)

The information provided on this document 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

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