

Safety Data Sheet

Glass Cleaner

Version 3.0

Revision Date 08/15/2014

Print Date 08/19/2014

SECTION 1. IDENTIFICATION

Commercial Product Name : Glass Cleaner
Product number : 0890925
SDS-Identcode : 10042290
Product Use Description : Cleaning agent
Company : Wurth USA Inc.
93 Grant St.
07446 Ramsey, NJ
USA
Telephone : +1 201 825 27 10
Telefax : +1 201 825 16 43
Responsible/issuing person : prodsafe@wuerth.com
Emergency telephone number : +1 800 255 3924

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Flammable aerosols : Category 1

GHS Label element

Hazard pictograms :



Signal word : Danger

Hazard statements : H222 Extremely flammable aerosol.

Precautionary statements : **Prevention:**
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container: Do not pierce or burn, even after use.

Storage:

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P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Weight percent- Weight percent
2-butoxyethanol	111-76-2	>= 1 - < 5
ethanol	64-17-5	>= 1 - < 5
propane	74-98-6	>= 1 - < 5
butane	106-97-8	>= 1 - < 5
morpholine	110-91-8	>= 0.1 - < 1
isopropanol	67-63-0	>= 0.1 - < 1

SECTION 4. FIRST AID MEASURES

- General advice : When symptoms persist or in all cases of doubt seek medical advice. Move out of dangerous area. If you feel unwell, seek medical advice (show the label where possible). Take off contaminated clothing and shoes immediately. Never give anything by mouth to an unconscious person.
- Inhalation : If breathed in, move person into fresh air. In the case of inhalation of aerosol/mist consult a physician if necessary.
- Skin contact : Immediately flush skin with large amounts of water. Do NOT use solvents or thinners.
- Eye contact : If easy to do, remove contact lens, if worn. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Ingestion : If swallowed, DO NOT induce vomiting. If symptoms persist, call a physician. If a person vomits when lying on his back, place him in the recovery position.

Notes to physician

- Treatment : Treat symptomatically and supportively.

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SECTION 5. FIREFIGHTING MEASURES

- | | | |
|---|---|---|
| Form | : | aerosol |
| Suitable extinguishing media | : | Foam
Alcohol-resistant foam
Carbon dioxide (CO ₂)
Dry chemical
Water mist |
| Unsuitable extinguishing media | : | High volume water jet |
| Specific hazards during firefighting | : | Do not use a solid water stream as it may scatter and spread fire.
Hazardous decomposition products may be formed under fire conditions (see section 10).
Exposure to decomposition products may be a hazard to health. |
| Special protective equipment for firefighters | : | Wear self-contained breathing apparatus for firefighting if necessary.
Use personal protective equipment. |
| Further information | : | Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
In the event of fire and/or explosion do not breathe fumes.
Use water spray to cool unopened containers.
If the temperature rises there is danger of the vessels bursting due to the high vapor pressure.
Exposure to decomposition products may be a hazard to health. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

- | | | |
|----------------------|---|--|
| Personal precautions | : | Refer to protective measures listed in sections 7 and 8. |
|----------------------|---|--|

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Ensure adequate ventilation, especially in confined areas.
Avoid inhalation of vapour or mist.

- Environmental precautions : Prevent further leakage or spillage if safe to do so.
Avoid subsoil penetration.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.
Clean contaminated surface thoroughly.

SECTION 7. HANDLING AND STORAGE**Handling**

- Handling : For personal protection see section 8.
Limit the stocks at work place.
Use only in well-ventilated areas.
Do not breathe vapours or spray mist.
Avoid contact with skin and eyes.
Do not spray on a naked flame or any incandescent material.

- Advice on protection against fire and explosion : Vapours are heavier than air and may spread along floors.
Vapours may form explosive mixtures with air.
Electrical equipment should be protected to the appropriate standard.
Do not smoke.
Keep away from heat and sources of ignition.

- Dust explosion class : Not applicable

Storage

- Requirements for storage areas and containers : BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects.
Keep containers tightly closed in a dry, cool and well-

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ventilated place.
Protect from frost, heat and sunlight.
Please observe the storage instructions for aerosols!

Advice on common storage : Incompatible with oxidizing agents.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Components	CAS-No.	List	Type:	Value	Update
2-butoxyethanol	111-76-2	ACGIH	TWA	20 ppm	2013-03-01
		OSHA Z-1	TWA	50 ppm 240 mg/m3	1997-08-04
		NIOSH REL	TWA	5 ppm 24 mg/m3	2005-09-01
		OSHA P0	TWA	25 ppm 120 mg/m3	1989-01-19
ethanol	64-17-5	OSHA Z-1	TWA	1,000 ppm 1,900 mg/m3	1997-08-04
		NIOSH REL	TWA	1,000 ppm 1,900 mg/m3	2013-10-08
		OSHA P0	TWA	1,000 ppm 1,900 mg/m3	1989-01-19
		ACGIH	STEL	1,000 ppm	2013-03-01
propane	74-98-6	OSHA Z-1	TWA	1,000 ppm 1,800 mg/m3	1997-08-04
		NIOSH REL	TWA	1,000 ppm 1,800 mg/m3	2013-10-08
		OSHA P0	TWA	1,000 ppm 1,800 mg/m3	1989-01-19
butane	106-97-8	NIOSH REL	TWA	800 ppm 1,900 mg/m3	2013-10-08
		OSHA P0	TWA	800 ppm 1,900 mg/m3	1989-01-19
		ACGIH	STEL	1,000 ppm	2013-03-01

Engineering measures : Provide adequate ventilation.

Eye protection : Safety glasses

Skin and body protection : impervious clothing

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

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Product contains low-boiling liquids. Respiratory protective equipment must be air supplied respirators.

Hygiene measures : Do not inhale aerosol.
Handle in accordance with good industrial hygiene and safety practice.
General industrial hygiene practice.
Avoid contact with skin, eyes and clothing.
When using do not eat, drink or smoke.
Wash hands before breaks and at the end of workday.
Wash contaminated clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: aerosol
Physical state	: aerosol
Colour	: colourless
Odour	: characteristic
Odour Threshold	: No data available
Flash point	: No data available
Ignition temperature	: No data available
Thermal decomposition	: No data available
Lower explosion limit	: 1.1 %(V)
Upper explosion limit	: 20 %(V)
Flammability	: Extremely flammable aerosol.
Molecular weight	: No data available
pH	: Not applicable
Boiling point/boiling range	: -42.22 - 168.89 °C (-44.00 - 336.00 °F) Not applicable
Vapour pressure	: No data available
Relative vapour density	: No data available
Evaporation rate	: No data available
Density	: 0.96 g/cm3

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Relative density : No data available
Bulk density : No data available
Water solubility : completely soluble

Partition coefficient: n-octanol/water : No data available
Solubility in other solvents : No data available
Viscosity, dynamic : No data available
Viscosity, kinematic : No data available
Volatile organic compounds (VOC) content : 11.2 %

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid : Heat, flames and sparks.
Materials to avoid : Oxidizing agents
Hazardous decomposition products : Carbon monoxide
Hazardous reactions : Vapours may form explosive mixtures with air.
Note: No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute dermal toxicity : Acute toxicity estimate
Dose: > 5,000 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate
Exposure time: 4 h
Dose: > 40 mg/l
Method: Calculation method

Carcinogenicity : No data is available on the product itself.
Reproductive toxicity : No data is available on the product itself.
Teratogenicity : No data is available on the product itself.
Further information : 2-Butoxy-ethanol and its acetate (2-Butoxy-ethyl-acetate)

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are skin resorptive and cause harmful effects to the blood.

Component:

2-butoxyethanol

111-76-2

Acute oral toxicity: LD50 Rat

Dose: 1,746 mg/kg

Method: OECD Test Guideline 401

Acute dermal toxicity: LD50

Dose: > 1,000 - 2,000 mg/kg

Acute inhalation toxicity: LC50

Dose: > 10 - 20 mg/l/Exposure time: 4 h

Skin irritation: Rabbit

Result: irritating

Method: Directive 67/548/EEC, Annex V, B.4.

Eye irritation: Rabbit

Result: Irritation to eyes, reversing within 7 days

Method: OECD Test Guideline 405

Carcinogenicity: Not classifiable as a human carcinogen.Reproductive toxicity: No toxicity to reproductionTeratogenicity: Animal testing did not show any effects on foetal development.

butane

106-97-8

Acute inhalation toxicity: LC50 Mouse

Dose: 1,237 mg/l 520400 ppm

Exposure time: 2 h

morpholine

110-91-8

Acute oral toxicity: LD50 Rat

Dose: 1,900 mg/kg

Method: OECD Test Guideline 401

Acute dermal toxicity: LD50

Dose: > 1,000 - 2,000 mg/kg

Acute inhalation toxicity: LC50

Dose: > 10 - 20 mg/l/Exposure time: 4 h

Skin irritation: Rabbit

Result: Causes burns.

Method: OECD Test Guideline 404

Carcinogenicity: Animal testing did not show any carcinogenic effects.Mutagenicity: In vivo tests did not show mutagenic effectsReproductive toxicity: No toxicity to reproductionTeratogenicity: Animal testing did not show any effects

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isopropanol	67-63-0	on foetal development. <u>Sensitisation</u> : Does not cause skin sensitisation. <u>Acute oral toxicity</u> : LD50 Rat Dose: 5,045 mg/kg <u>Acute dermal toxicity</u> : LD50 Rabbit Dose: 12,800 mg/kg <u>Acute inhalation toxicity</u> : LC50 Rat Dose: 46.5 mg/l/Exposure time: 4 h <u>Eye irritation</u> : Result: Irritating to eyes.
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Carcinogenicity:**ACGIH**

2-butoxyethanol	111-76-2
ethanol	64-17-5

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.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC

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

SECTION 12. ECOLOGICAL INFORMATION

Adsorbed organic bound halogens (AOX)	: not included
Volatile organic compounds (VOC) content	: 11.2 %
Additional ecological information	: The product should not be allowed to enter drains, water courses or the soil.

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Component:

2-butoxyethanol

111-76-2

Toxicity to fish:

LC50

Species: Oncorhynchus mykiss (rainbow trout)

Dose: 1,474 mg/l

Exposure time: 96 h

Acute and prolonged toxicity for aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Dose: 1,550 mg/l

Exposure time: 48 h

Toxicity to algae:

EC50

Species: Pseudokirchneriella subcapitata (green algae)

Dose: 911 mg/l

Exposure time: 72 h

Toxicity to algae:

NOEC

Species: Pseudokirchneriella subcapitata (green algae)

Dose: 88 mg/l

Exposure time: 72 h

morpholine

110-91-8

Toxicity to fish:

LC50

Species: Oncorhynchus mykiss (rainbow trout)

Dose: 380 mg/l

Exposure time: 96 h

Acute and prolonged toxicity for aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Dose: 45 mg/l

Exposure time: 48 h

Toxicity to algae:

EC50

Species: Selenastrum capricornutum (green algae)

Dose: 28 mg/l

Exposure time: 96 h

isopropanol

67-63-0

Toxicity to fish:

LC50

Species: Pimephales promelas (fathead minnow)

Dose: 9,640 mg/l

Exposure time: 96 h

Acute and prolonged toxicity for aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Dose: 13,299 mg/l

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Exposure time: 48 h

SECTION 13. DISPOSAL CONSIDERATIONS

Adequate disposal : In accordance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION**DOT 49 CFR**

ID No : UN 1950
Proper shipping name : Aerosols
Class : 2.1
Labels : 2.1
Emergency Response : 126
Guidebook Number

TDGR

ID No : UN 1950
Proper shipping name : AEROSOLS
Class : 2.1
Labels : 2.1

ICAO/IATA-DGR

ID No : UN 1950
Proper shipping name : Aerosols, flammable
Class : 2.1
ICAO-Labels : 2.1
Packing instruction (cargo : 203
aircraft)
Packing instruction : 203
(passenger aircraft)
Packing instruction : Y203
(passenger aircraft)
Environmentally hazardous : no

IMDG-Code

ID No : UN 1950
Description of the goods : AEROSOLS

Class : 2.1

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IMDG-Labels : 2.1
 EmS Number 1 : F-D
 EmS Number 2 : S-U
 Marine pollutant : no

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards : Sudden Release of Pressure Hazard
 Fire Hazard

CERCLA Reportable Quantity : This material does not contain any components with a CERCLA RQ.

EPCRA_313 US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

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.

EPCRA_302 US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

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

PENN RTK US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

Components	CAS-No.
water	7732-18-5
2-butoxyethanol	111-76-2
ethanol	64-17-5
propane	74-98-6
butane	106-97-8
isopropanol	67-63-0

MASS RTK US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

Components	CAS-No.
2-butoxyethanol	111-76-2
ethanol	64-17-5

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propane	74-98-6
butane	106-97-8

NJ RTK

US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

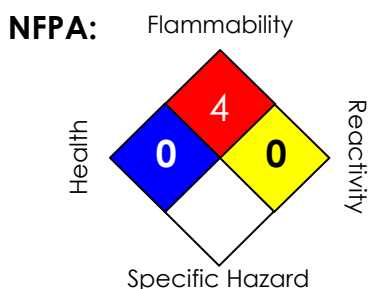
Components	CAS-No.
water	7732-18-5
2-butoxyethanol	111-76-2
ethanol	64-17-5
propane	74-98-6
butane	106-97-8

California Prop. 65

: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16. OTHER INFORMATION

Further information



HMIS III:

HEALTH	0
FLAMMABILITY	4
PHYSICAL	0

0 = Insignificant, 1 =Slight,
2 =Moderate, 3 =High, 4 = Extreme

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 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.

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