

# TW11 - CITRUS POLISHED ALUMINUM BRIGHTNER

## Safety Data Sheet

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

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### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : TW11 - CITRUS POLISHED ALUMINUM BRIGHTNER  
Product code : TW11

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Industrial and Institutional Aluminum Brightener

#### 1.3. Details of the supplier of the safety data sheet

Sky Blue Chemical  
760 W. Exchange Road  
Ogden, Utah 84401 - USA  
T (801) 394-8611  
[www.skybluechemical.com](http://www.skybluechemical.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

Met. Corr. 1 H290  
Acute Tox. 4 (Inhalation:dust,mist) H332  
Skin Corr. 1 H314

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

#### 2.2. Label elements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

**Danger**

Hazard statements (GHS US) :

H290 - May be corrosive to metals  
H314 - Causes severe skin burns and eye damage  
H332 - Harmful if inhaled

Precautionary statements (GHS US)

Prevention

: P234 - Keep only in original container.  
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response

: P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 - Immediately call a poison center or doctor.  
P312 - Call a poison center or doctor if you feel unwell.  
P321 - Specific treatment (see supplemental first aid instruction on this label).  
P363 - Wash contaminated clothing before reuse.  
P390 - Absorb spillage to prevent material-damage.

Storage

: P405 - Store locked up.  
P406 - Store in corrosive resistant container with a resistant inner liner.

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Disposal : P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards

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

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Sulfuric acid	(CAS-No.) 7664-93-9	10 – 20	Skin Corr. 1A, H314 Aquatic Acute 3, H402
Phosphoric acid	(CAS-No.) 7664-38-2	5 – 10	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314
butyl glycoether	(CAS-No.) 111-76-2	1 – 3	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2B, H320
Oxalic acid, dihydrate	(CAS-No.) 6153-56-6	1 – 3	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : Causes severe skin burns and eye damage.

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

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

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.

Reactivity : The product is non-reactive under normal conditions of use, storage and transport. Contact with reactive metals such as aluminum will generate hydrogen gas. Contact with strong caustic materials will generate heat.

### 5.3. Advice for firefighters

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

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### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- Protective equipment : Protective goggles. Safety glasses. Face shield. Protective clothing.
- Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene. Ventilate spillage area. Use personal protective equipment (PPE). Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray.

##### 6.1.2. 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".

#### 6.2. Environmental precautions

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

#### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material. Neutralize spill with quicklime or soda ash. Scoop absorbed substance into closing containers. Wash down leftovers with plenty of water.
- Other information : Dispose of contents/container to {0|message=<specify in accordance with local/regional/national/international regulations>|default=hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation|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 : Do not handle until all safety precautions have been read and understood. Clean contaminated clothing. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Wear personal protective equipment.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep cool. Keep container closed when not in use. Store in corrosive resistant container with a resistant inner liner. Keep only in original container. Store locked up. Store in a well-ventilated place. Keep cool.
- Incompatible products : Bases. Oxidizing agent. Reducing agents. Reactive metals.
- Incompatible materials : Metals.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

butyl glycoether (111-76-2)		
ACGIH	ACGIH OEL TWA [ppm]	20 ppm
ACGIH	Remark (ACGIH)	Eye & URT irr
OSHA	OSHA PEL (TWA) [1]	240 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) [2]	50 ppm
Phosphoric acid (7664-38-2)		
ACGIH	ACGIH OEL TWA	1 mg/m <sup>3</sup>
ACGIH	ACGIH OEL STEL	3 mg/m <sup>3</sup>
ACGIH	Remark (ACGIH)	URT, eye, & skin irr
OSHA	OSHA PEL (TWA) [1]	1 mg/m <sup>3</sup>
Oxalic acid, dihydrate (6153-56-6)		
ACGIH	ACGIH OEL TWA	1 mg/m <sup>3</sup>

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Oxalic acid, dihydrate (6153-56-6)		
ACGIH	ACGIH OEL STEL	2 mg/m <sup>3</sup>
Sulfuric acid (7664-93-9)		
ACGIH	ACGIH OEL TWA	0.2 mg/m <sup>3</sup>
ACGIH	Remark (ACGIH)	Pulm func
OSHA	OSHA PEL (TWA) [1]	1 mg/m <sup>3</sup>

### 8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Hand protection	: Protective gloves.
Eye protection	: Chemical goggles or safety glasses. Safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Wear respiratory protection.
Environmental exposure controls	: Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear, colourless to light amber liquid. : No data available : No data available
Odor threshold	: No data available
pH	: < 1
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 212 °F
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	: 1.16
Density	: 9.71 lb/gal
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

VOC content	: 3.5 %
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport. Contact with reactive metals such as aluminum will generate hydrogen gas. Contact with strong caustic materials will generate heat.

### 10.2. Chemical stability

Stable under normal conditions.

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### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

Bases. Oxidizing agent. Reducing agents. Reactive metals. metals.

### 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 : Not classified

TW11 - CITRUS POLISHED ALUMINUM BRIGHTNER	
ATE US (dust, mist)	2.004 mg/l/4h
butyl glycolether (111-76-2)	
LD50 oral rat	1746 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 14 day(s))
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	> 4.26 mg/l (4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
ATE US (oral)	1746 mg/kg body weight
ATE US (dermal)	435 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
Phosphoric acid (7664-38-2)	
LD50 oral rat	1530 mg/kg (85 % aqueous solution; Rat; Equivalent or similar to OECD 423; Literature study; 2600 mg/kg bodyweight; 80 % aqueous solution; Rat; Experimental value; 3500 mg/kg bodyweight; 75 % aqueous solution; Rat; Experimental value; 4200 mg/kg bodyweight; Rat; Experimental value; 4400 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	2740 mg/kg body weight (85 % aqueous solution; Rabbit; Experimental value; >1260 mg/kg bodyweight; 80 % aqueous solution; Rabbit; Experimental value; >3160 mg/kg bodyweight; 75 % aqueous solution; Rabbit; Experimental value; >3160 mg/kg bodyweight; Rabbit; Experimental value)
ATE US (oral)	1530 mg/kg body weight
ATE US (dermal)	2740 mg/kg body weight
Oxalic acid, dihydrate (6153-56-6)	
LD50 oral rat	1080 mg/kg
LD50 dermal rabbit	20000 mg/kg body weight (Rabbit, Experimental value, Anhydrous form, Dermal)
ATE US (oral)	1080 mg/kg body weight
ATE US (dermal)	20000 mg/kg body weight
Sulfuric acid (7664-93-9)	
LD50 oral rat	2140 mg/kg body weight (Rat, Experimental value, Oral, 14 day(s))
LC50 Inhalation - Rat	0.38 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 21 day(s))
ATE US (oral)	2140 mg/kg body weight
ATE US (vapors)	0.38 mg/l/4h
ATE US (dust, mist)	0.38 mg/l/4h

Skin corrosion/irritation : Causes severe skin burns.  
pH: < 1

Serious eye damage/irritation : Assumed to cause serious eye damage  
pH: < 1

Respiratory or skin sensitization : Not classified

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Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified

<b>butyl glycoether (111-76-2)</b>	
IARC group	3 - Not classifiable

<b>Sulfuric acid (7664-93-9)</b>	
National Toxicology Program (NTP) Status	2 - Known Human Carcinogens

Reproductive toxicity : Not classified  
STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Symptoms/effects after skin contact : Burns.  
Symptoms/effects after eye contact : Serious damage to eyes.  
Symptoms/effects after ingestion : Burns.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

<b>butyl glycoether (111-76-2)</b>	
LC50 - Fish [1]	1474 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	1550 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	911 mg/l (72 Hr.)

<b>Phosphoric acid (7664-38-2)</b>	
LC50 - Fish [1]	138 mg/l (96 h; Pisces; Pure substance)
LC50 - Other aquatic organisms [1]	100-1000,96 h; Protozoa; Pure substance
EC50 - Crustacea [1]	> 100 mg/l (48 h; Daphnia magna; Pure substance)
LC50 - Fish [2]	100 – 1000 mg/l (Pisces; Pure substance)
LC50 - Other aquatic organisms [2]	240 mg/l (96 h; Pure substance)
TLM - Fish [1]	138 ppm (96 h; Gambusia affinis; Pure substance)
Threshold limit - Other aquatic organisms [1]	100-1000,96 h; Protozoa; Pure substance
Threshold limit - Other aquatic organisms [2]	240 mg/l (96 h; Pure substance)
Threshold limit - Algae [1]	> 100 mg/l (72 h; Desmodesmus subspicatus; Pure substance)
Threshold limit - Algae [2]	100 mg/l (72 h; Desmodesmus subspicatus; Pure substance)

<b>Oxalic acid, dihydrate (6153-56-6)</b>	
LC50 - Fish [1]	160 mg/l (48 h, Leuciscus idus, Static system, Fresh water, Experimental value, Anhydrous form)
LC50 - Other aquatic organisms [1]	5330 mg/l (96 h, Xenopus laevis, Fresh water, Experimental value, Anhydrous form)
EC50 - Crustacea [1]	162.2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Fresh water, Experimental value, Anhydrous form)

<b>Sulfuric acid (7664-93-9)</b>	
LC50 - Fish [1]	16 – 28 mg/l (96 h, Lepomis macrochirus, Static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)

### 12.2. Persistence and degradability

<b>butyl glycoether (111-76-2)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Photodegradation in the air.
Biochemical oxygen demand (BOD)	0.71 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.2 g O <sub>2</sub> /g substance
ThOD	2.305 g O <sub>2</sub> /g substance

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<b>butyl glycoether (111-76-2)</b>	
BOD (% of ThOD)	0.31
<b>Phosphoric acid (7664-38-2)</b>	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
ThOD	Not applicable
<b>Oxalic acid, dihydrate (6153-56-6)</b>	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water. Readily biodegradable in water in anaerobic conditions.
<b>Sulfuric acid (7664-93-9)</b>	
Persistence and degradability	Biodegradability: not applicable.
BOD (% of ThOD)	Not applicable

### 12.3. Bioaccumulative potential

<b>butyl glycoether (111-76-2)</b>	
Partition coefficient n-octanol/water (Log Pow)	0.81 (Experimental value; BASF test; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
<b>Phosphoric acid (7664-38-2)</b>	
Bioaccumulative potential	Not bioaccumulative.
<b>Oxalic acid, dihydrate (6153-56-6)</b>	
Partition coefficient n-octanol/water (Log Pow)	-1.7 (Anhydrous form, Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 23 °C)
Bioaccumulative potential	Not bioaccumulative.
<b>Sulfuric acid (7664-93-9)</b>	
Partition coefficient n-octanol/water (Log Pow)	-2.2 (Estimated value)
Bioaccumulative potential	Not bioaccumulative.

### 12.4. Mobility in soil

<b>butyl glycoether (111-76-2)</b>	
Surface tension	0.027 N/m (25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.451 – 0.882 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.
<b>Oxalic acid, dihydrate (6153-56-6)</b>	
Surface tension	70100 mN/m (25 °C, 0.015 mol/l)
Ecology - soil	No (test)data on mobility of the substance available.
<b>Sulfuric acid (7664-93-9)</b>	
Ecology - soil	No (test)data on mobility of the substance available.

### 12.5. Other adverse effects

## SECTION 13: Disposal considerations

### 13.1. Waste treatment 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 hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Transport document description (DOT) : UN3264 Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric Acid, Phosphoric Acid), 8, II

UN-No.(DOT) : UN3264

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Proper Shipping Name (DOT)	: Corrosive liquid, acidic, inorganic, n.o.s. Sulfuric Acid, Phosphoric Acid
Class (DOT)	: 8 - Class 8 - Corrosive material 49 CFR 173.136
Packing group (DOT)	: II - Medium Danger
Hazard labels (DOT)	: 8 - Corrosive



DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Special Provisions (49 CFR 172.102)	: 386 - Notwithstanding the provisions of §177.834(l) of this subchapter, cargo heaters may be used when weather conditions are such that the freezing of a wetted explosive material is likely. Shipments must be made by private, leased or contract carrier vehicles under exclusive use of the offeror. Cargo heaters must be reverse refrigeration (heat pump) units. Shipments made in accordance with this Special provision are excepted from the requirements of §173.60(b)(4) of this subchapter. B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). 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. T11 - 6 178.274(d)(2) Normal..... 178.275(d)(3) TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: $t_r$ is the maximum mean bulk temperature during transport, $t_f$ is the temperature in degrees celsius of the liquid during filling, and $a$ is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling ( $t_f$ ) and the maximum mean bulk temperature during transportation ( $t_r$ ) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: $d_{15}$ and $d_{50}$ are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively. TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, 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)	: 154
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 30 L
DOT Vessel Stowage Location	: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
DOT Vessel Stowage Other	: 40 - Stow "clear of living quarters"
Emergency Response Guide (ERG) Number	: 154
Other information	: No supplementary information available.

### Transportation of Dangerous Goods

Not applicable

### Transport by sea

UN-No. (IMDG)	: 3264
Proper Shipping Name (IMDG)	: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Class (IMDG)	: 8 - Corrosive substances
Packing group (IMDG)	: II - substances presenting medium danger
Limited quantities (IMDG)	: 1 L
Marine pollutant	:



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### Air transport

UN-No. (IATA)	: 3264
Proper Shipping Name (IATA)	: Corrosive liquid, acidic, inorganic, n.o.s.
Class (IATA)	: 8 - Corrosives
Packing group (IATA)	: II - Medium Danger

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

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

Oxalic acid	CAS-No. 144-62-7	< 0.1%
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Contains chemical(s) subject to TSCA 12b export notification if product is shipped outside the U.S

Oxalic acid	CAS-No. 144-62-7	< 0.1%
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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	< 0.1%
1,4-dioxane	CAS-No. 123-91-1	< 0.1%
Ethylene oxide	CAS-No. 75-21-8	< 0.1%
Methyl alcohol	CAS-No. 67-56-1	< 0.1%
Sulfuric acid	CAS-No. 7664-93-9	10 – 20%

#### butyl glycolether (111-76-2)

SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	1 %

#### ethylene glycol (107-21-1)

CERCLA RQ	5000 lb
SARA Section 313 - Emission Reporting	1 %

#### Lauryl glucoside (110615-47-9)

EPA TSCA Regulatory Flag	N - N - indicates a polymeric substance containing no free-radical initiator in its Inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used. P - P - indicates a commenced Premanufacture Notice (PMN) substance.
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#### Phosphoric acid (7664-38-2)

CERCLA RQ	5000 lb
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#### Oxalic acid (144-62-7)

EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a final TSCA section 4 test rule.
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#### 1,4-dioxane (123-91-1)

CERCLA RQ	100 lb
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#### Ethylene oxide (75-21-8)

CERCLA RQ	10 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb

#### Methyl alcohol (67-56-1)

CERCLA RQ	5000 lb
SARA Section 313 - Emission Reporting	1 %

#### Sulfuric acid (7664-93-9)

CERCLA RQ	1000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb

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### 15.2. International regulations

#### TW11 - CITRUS POLISHED ALUMINUM BRIGHTNER

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

#### ethylene glycol (107-21-1)

Listed on EPA Hazardous Air Pollutant (HAPS)

#### Oxalic acid, dihydrate (6153-56-6)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### 1,4-dioxane (123-91-1)

Listed on IARC (International Agency for Research on Cancer)  
Listed as carcinogen on NTP (National Toxicology Program)  
Listed on EPA Hazardous Air Pollutant (HAPS)

#### Ethylene oxide (75-21-8)

Listed on IARC (International Agency for Research on Cancer)  
Listed as carcinogen on NTP (National Toxicology Program)  
Listed on EPA Hazardous Air Pollutant (HAPS)

#### Methyl alcohol (67-56-1)

Listed on EPA Hazardous Air Pollutant (HAPS)

#### Sulfuric acid (7664-93-9)

Listed as carcinogen on NTP (National Toxicology Program)

### 15.3. US State regulations

This product can expose you to Ethylene oxide, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

#### ethylene glycol (107-21-1)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	Yes	No	No	

#### 1,4-dioxane (123-91-1)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	30 µg/day

#### Ethylene oxide (75-21-8)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	2 µg/day

#### Methyl alcohol (67-56-1)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	Yes	No	No	

# TW11 - CITRUS POLISHED ALUMINUM BRIGHTNER

## Safety Data Sheet

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

### butyl glycoether (111-76-2)

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

### ethylene glycol (107-21-1)

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

### Phosphoric acid (7664-38-2)

U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

### Oxalic acid (144-62-7)

U.S. - New Jersey - Right to Know Hazardous Substance List

### Glycerol (56-81-5)

U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

### 1,4-dioxane (123-91-1)

U.S. - New Jersey - Right to Know Hazardous Substance List

### Ethylene oxide (75-21-8)

U.S. - New Jersey - Right to Know Hazardous Substance List

### Methyl alcohol (67-56-1)

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List

### Sulfuric acid (7664-93-9)

U.S. - New Jersey - Right to Know Hazardous Substance List

## SECTION 16: Other information

Revision date : 05/03/2022  
Other information : Initial release.

Full text of H-phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Flam. Liq. 4	Flammable liquids Category 4
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1	Skin corrosion/irritation Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
H332	Harmful if inhaled

SDS US (GHS HazCom 2012) - Custom

*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.*