

CW21 - SUPERTRATE LOW PH FRICTION DETERGENT

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 : CW21 - SUPERTRATE LOW PH FRICTION DETERGENT
Product code : CW21

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

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

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

Skin Corr. 1 Causes severe skin burns and eye damage

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



GHS05

Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

Causes severe skin burns and eye damage

Precautionary statements (GHS US)

Prevention

: Do not breathe dust/fume/gas/mist/vapors/spray.
Wash hands, forearms and face thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.

Response

: If swallowed: rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center or doctor.
Specific treatment (see supplemental first aid instruction on this label).
Wash contaminated clothing before reuse.

Storage

: Store locked up.

Disposal

: 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)

CW21 - SUPERTRATE LOW PH FRICTION DETERGENT

Safety Data Sheet

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

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Methanesulfonic acid	(CAS-No.) 75-75-2	10 – 20	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1, H314
Sodium xylenesulfonate	(CAS-No.) 1300-72-7	5 – 10	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
butyl glycoether	(CAS-No.) 111-76-2	3 – 5	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
Lauryldimethylamine oxide	(CAS-No.) 1643-20-5	1 – 3	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 2, H401 Aquatic Chronic 2, H411

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.
- 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 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 : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

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.

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. 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".

CW21 - SUPERTRATE LOW PH FRICTION DETERGENT

Safety Data Sheet

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

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Methanesulfonic acid (75-75-2)		
Not applicable		
Lauryldimethylamine oxide (1643-20-5)		
Not applicable		
Sodium xylenesulfonate (1300-72-7)		
Not applicable		
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 ³
OSHA	OSHA PEL (TWA) [2]	50 ppm

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.
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.
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
: No data available
: No data available
Odor threshold : No data available
pH : > 2
Melting point : Not applicable
Freezing point : No data available
Boiling point : No data available

CW21 - SUPERTRATE LOW PH FRICTION DETERGENT

Safety Data Sheet

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

Flash point	: > 212 °F
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Density	: 9.49 lb/gal
Solubility	: No data available
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

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

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

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

10.5. Incompatible materials

No additional information available

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

Methanesulfonic acid (75-75-2)	
LD50 oral rat	649 mg/kg
LD50 dermal rabbit	1000 – 2000 mg/kg
ATE US (oral)	649 mg/kg body weight
ATE US (dermal)	1000 mg/kg body weight
Lauryldimethylamine oxide (1643-20-5)	
LD50 oral rat	1064 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
ATE US (oral)	1064 mg/kg body weight
Sodium xylenesulfonate (1300-72-7)	
LD50 oral rat	> 7000 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 6.41 mg/l (Equivalent or similar to OECD 403, 232 minutes, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))

CW21 - SUPERTRATE LOW PH FRICTION DETERGENT

Safety Data Sheet

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

butyl glycoether (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

Skin corrosion/irritation	: Causes severe skin burns. pH: > 2
Serious eye damage/irritation	: Assumed to cause serious eye damage pH: > 2
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

butyl glycoether (111-76-2)	
IARC group	3 - Not classifiable
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.

Lauryldimethylamine oxide (1643-20-5)	
LC50 - Fish [1]	134 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value)
EC50 - Crustacea [1]	3.9 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)

Sodium xylenesulfonate (1300-72-7)	
LC50 - Fish [1]	> 1000 mg/l (EPA OTS 797.1400, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value)
EC50 - Crustacea [1]	> 1000 mg/l (EPA OTS 797.1300, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)

butyl glycoether (111-76-2)	
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.)

12.2. Persistence and degradability

Methanesulfonic acid (75-75-2)	
Persistence and degradability	Readily biodegradable in water.

CW21 - SUPERTRATE LOW PH FRICTION DETERGENT

Safety Data Sheet

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

Lauryldimethylamine oxide (1643-20-5)	
Persistence and degradability	Readily biodegradable in water.
Sodium xylenesulfonate (1300-72-7)	
Persistence and degradability	Readily biodegradable in water.
butyl glycoether (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 O ₂ /g substance
Chemical oxygen demand (COD)	2.2 g O ₂ /g substance
ThOD	2.305 g O ₂ /g substance
BOD (% of ThOD)	0.31

12.3. Bioaccumulative potential

Methanesulfonic acid (75-75-2)	
Partition coefficient n-octanol/water (Log Pow)	-1.22
Bioaccumulative potential	Not bioaccumulative.
Lauryldimethylamine oxide (1643-20-5)	
Partition coefficient n-octanol/water (Log Pow)	< 2.7 (Calculated)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Sodium xylenesulfonate (1300-72-7)	
Partition coefficient n-octanol/water (Log Pow)	-3.12 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Bioaccumulative potential	Not bioaccumulative.
butyl glycoether (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).

12.4. Mobility in soil

Lauryldimethylamine oxide (1643-20-5)	
Ecology - soil	Low potential for adsorption in soil.
Sodium xylenesulfonate (1300-72-7)	
Surface tension	71 mN/m (20 °C, 90 %, EU Method A.5: Surface tension)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.42 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.
butyl glycoether (111-76-2)	
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.

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.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description (DOT) : UN3265 Corrosive liquid, acidic, organic, n.o.s., 8, III

UN-No.(DOT) : UN3265

Proper Shipping Name (DOT) : Corrosive liquid, acidic, organic, n.o.s.

Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

CW21 - SUPERRATE LOW PH FRICTION DETERGENT

Safety Data Sheet

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

Packing group (DOT) : III - Minor Danger
Hazard labels (DOT) : 8 - Corrosive



DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 241
DOT Symbols : G - Identifies PSN requiring a technical name
DOT Special Provisions (49 CFR 172.102) : 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).
T7 - 4 178.274(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.
TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 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) : 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L
DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"
Emergency Response Guide (ERG) Number : 153
Other information : No supplementary information available.

Transportation of Dangerous Goods

Not applicable

Transport by sea

UN-No. (IMDG) : 3265
Proper Shipping Name (IMDG) : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Class (IMDG) : 8 - Corrosive substances
Packing group (IMDG) : III - substances presenting low danger
Limited quantities (IMDG) : 5 L
Marine pollutant :

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

Citric acid (77-92-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Methanesulfonic acid (75-75-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

CW21 - SUPERTRATE LOW PH FRICTION DETERGENT

Safety Data Sheet

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

Lauryldimethylamine oxide (1643-20-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
butyl glycoether (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)	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5000 lb
SARA Section 313 - Emission Reporting	1 %
Alkyl Benzene-Ln. (C10-13) (129813-58-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Sulfuric acid (7664-93-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313 Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	1000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb

15.2. International regulations

Water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Sodium sulfate (7757-82-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Sodium xylenesulfonate (1300-72-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
butyl glycoether (111-76-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
ethylene glycol (107-21-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Listed on EPA Hazardous Air Pollutant (HAPS)
Sulfuric acid (7664-93-9)
Listed as carcinogen on NTP (National Toxicology Program)
Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

15.3. US State regulations

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	

Methanesulfonic acid (75-75-2)
U.S. - New Jersey - Right to Know Hazardous Substance List

CW21 - SUPERTRATE LOW PH FRICTION DETERGENT

Safety Data Sheet

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

Sodium sulfate (7757-82-6)

U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) List

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

Sulfuric acid (7664-93-9)

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

SECTION 16: Other information

Revision date : 03/15/2023

Full text of H-phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 2	Hazardous to the aquatic environment – Acute Hazard Category 2
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard Category 2
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
Skin Corr. 1	Skin corrosion/irritation Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

SDS US (GHS HazCom 2012) - Custom