

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : DGW-7643W

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Smart Chemical Solutions, LLC
3505 Olsen Blvd
Suite 201
Amarillo, TX 79109
T (806) 367-8031

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

Acute toxicity (inhalation:dust,mist) Category 4	H332	Harmful if inhaled
Serious eye damage/eye irritation Category 1	H318	Causes serious eye damage
Hazardous to the aquatic environment - Acute Hazard Category 3	H402	Harmful to aquatic life

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger

Hazard statements (GHS US) : H318 - Causes serious eye damage
H332 - Harmful if inhaled
H402 - Harmful to aquatic life

Precautionary statements (GHS US) : 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.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
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.

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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.
P370+P378 - In case of fire: Use media other than water to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
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 which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

3.6% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
37.1% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
7.8% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
1,2-Ethanediol	CAS-No.: 107-21-1	10 – 30
Sodium Metasilicate	CAS-No.: 6834-92-0	1 – 10
Caustic Soda 50%	CAS-No.: 1310-73-2	1 – 5
TDET 91-6	CAS-No.: 68439-46-3	1 – 5
2-Butoxyethanol	CAS-No.: 111-76-2	1 – 5

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 (acute and delayed)

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

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4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Fire hazard : Combustible liquid.
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. 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.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
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 : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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7.2. Conditions for safe storage, including any incompatibilities

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

1,2-Ethanediol (107-21-1)

USA - ACGIH - Occupational Exposure Limits

Local name	Ethylene glycol
ACGIH OEL TWA [ppm]	25 ppm (Vapor fraction)
ACGIH OEL STEL	10 mg/m ³ (Inhalable fraction, Aerosol only)
ACGIH OEL STEL [ppm]	50 ppm (Vapor fraction)
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2022

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:

Wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Clear.
Color : Colorless
Odor : slight
Odor threshold : No data available

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pH	: 11.78 – 12.78
Melting point	: Not applicable
Freezing point	: -8°F
Boiling point	: No data available
Flash point	: No data available
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	: No data available
Density	: 8.871 – 9.171
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

No additional information available

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

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

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 (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Harmful if inhaled.

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ATE US (dust, mist)	4.478 mg/l/4h
Unknown acute toxicity (GHS US)	3.6% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 37.1% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 7.8% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

1,2-Ethanediol (107-21-1)

LD50 oral rat	7712 mg/kg body weight (according to BASF-internal standards, Rat, Male / female, Experimental value, Aqueous solution, Oral, 7 day(s))
LD50 dermal	> 3500 mg/kg body weight (Mouse, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	> 2.5 mg/l (6 h, Rat, Male / female, Experimental value, Inhalation (aerosol))
ATE US (oral)	7712 mg/kg body weight
ATE US (dust, mist)	1.5 mg/l/4h

Sodium Metasilicate (6834-92-0)

LD50 oral rat	1152 – 1349 mg/kg body weight (Rat, Male / female, Experimental value, Oral, 7 day(s))
LD50 dermal rat	> 5000 mg/kg body weight (EPA OPPTS 870.1200: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 2.06 mg/l (EPA OPPTS 870.1300: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
ATE US (oral)	1152 mg/kg body weight
ATE US (dust, mist)	1.5 mg/l/4h

TDET 91-6 (68439-46-3)

LD50 oral rat	1378 mg/kg Source: Corporate Solution From Thomson Micromedex
LD50 dermal rabbit	2000 mg/kg Source: Corporate Solution From Thomson Micromedex
ATE US (oral)	1378 mg/kg body weight
ATE US (dermal)	2000 mg/kg body weight

2-Butoxyethanol (111-76-2)

LD50 dermal rat	> 2000 mg/kg Source: ECHA
ATE US (oral)	500 mg/kg body weight
ATE US (dust, mist)	1.5 mg/l/4h

Skin corrosion/irritation : Causes severe skin burns.
pH: 11.78 – 12.78

Caustic Soda 50% (1310-73-2)

pH	> 14 (20 °C)
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TDET 91-6 (68439-46-3)

pH	6 – 7.5
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Serious eye damage/irritation : Causes serious eye damage.
pH: 11.78 – 12.78

Caustic Soda 50% (1310-73-2)

pH	> 14 (20 °C)
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TDET 91-6 (68439-46-3)

pH : 6 – 7.5

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Sodium Metasilicate (6834-92-0)

STOT-single exposure : May cause respiratory irritation.

STOT-repeated exposure : Not classified

Sodium Metasilicate (6834-92-0)

NOAEL (oral,rat,90 days) : 227 – 237 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

Sodium Metasilicate (6834-92-0)

Viscosity, kinematic : Not applicable (solid)

Caustic Soda 50% (1310-73-2)

Viscosity, kinematic : 51.803 mm²/s

Symptoms/effects after skin contact : Not determined

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

Symptoms/effects after ingestion : Not determined

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life.

1,2-Ethandiol (107-21-1)

LC50 - Fish [1] : > 72860 mg/l (EPA 600/4-90/027, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Nominal concentration)

EC50 - Crustacea [1] : > 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, Daphnia magna, Static system, Fresh water, Experimental value)

EC50 96h - Algae [1] : 6500 – 13000 mg/l Source: ECHA

NOEC (chronic) : ≥ 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'

Sodium Metasilicate (6834-92-0)

LC50 - Fish [1] : 210 mg/l (ISO 7346-1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value)

EC50 - Crustacea [1] : 1700 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)

EC50 72h - Algae [1] : 207 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

TDET 91-6 (68439-46-3)

LC50 - Fish [1] : 8.5 mg/l Source: ECOTOX

EC50 - Crustacea [1] : 2.686 mg/l Source: ECOTOX

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2-Butoxyethanol (111-76-2)

LC50 - Fish [1]	1474 mg/l Source: ECHA
EC50 - Crustacea [1]	1800 mg/l Source: ECHA
EC50 72h - Algae [1]	911 mg/l Source: ECHA

12.2. Persistence and degradability

1,2-Ethandiol (107-21-1)

Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.47 g O ₂ /g substance
Chemical oxygen demand (COD)	1.24 g O ₂ /g substance
ThOD	1.29 g O ₂ /g substance

Sodium Metasilicate (6834-92-0)

Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

Caustic Soda 50% (1310-73-2)

Persistence and degradability	Biodegradability: not applicable.
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12.3. Bioaccumulative potential

1,2-Ethandiol (107-21-1)

Partition coefficient n-octanol/water (Log Pow)	-1.36 (Experimental value)
Bioaccumulative potential	Not bioaccumulative.

Sodium Metasilicate (6834-92-0)

Partition coefficient n-octanol/water (Log Pow)	-5.65
Bioaccumulative potential	Not bioaccumulative.

Caustic Soda 50% (1310-73-2)

Bioaccumulative potential	Does not contain bioaccumulative component(s).
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2-Butoxyethanol (111-76-2)

Partition coefficient n-octanol/water (Log Pow)	0.81 Source: ECHA
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12.4. Mobility in soil

1,2-Ethandiol (107-21-1)

Mobility in soil	0.2 Source: HSDB
Surface tension	48.4 mN/m (20 °C)
Ecology - soil	Highly mobile in soil.

Sodium Metasilicate (6834-92-0)

Surface tension	No data available in the literature
Ecology - soil	Low potential for adsorption in soil.

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Caustic Soda 50% (1310-73-2)

Ecology - soil

No (test)data on mobility of the component(s) available.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

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

SECTION 14: Transport information

DOT	IMDG	IATA
14.1. UN number		
Not regulated	Not applicable	Not applicable
14.2. Proper Shipping Name		
Not regulated	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not regulated	Not applicable	Not applicable
14.4. Packing group		
Not regulated	Not applicable	Not applicable
14.5. Environmental hazards		
Not regulated	Not applicable	Not applicable
No supplementary information available		

14.6. Special precautions for user

DOT

Not regulated

IMDG

Not applicable

IATA

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

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

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1,2-Ethanediol	CAS-No. 107-21-1	10 – 30%
Sodium Metasilicate	CAS-No. 6834-92-0	1 – 10%
Caustic Soda 50%	CAS-No. 1310-73-2	1 – 5%
TDET 91-6	CAS-No. 68439-46-3	1 – 5%
2-Butoxyethanol	CAS-No. 111-76-2	1 – 5%

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

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

Full text of H-phrases	
H318	Causes serious eye damage
H332	Harmful if inhaled
H401	Toxic to aquatic life

Safety Data Sheet (SDS), USA