

Safety Data Sheet

WATER GLASS GLUE

SDS Revision Date:

1/30/2023



1. Identification

1.1. Product identifier

Product Identity

WATER GLASS GLUE

Alternate Names

40-410, Blended Formula, Water Glass Glue, High temperature Chamber Glue- 1 qt

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

Intended use

It is a high temperature refractory glue to repair and set combustion chambers found in various boilers and furnaces.

Application Method

Read all precautions and instructions carefully before and after use.

1.3. Details of the supplier of the safety data sheet

Company Name

ComStar International Inc.
20-45 128th Street,
College Point, NY 11356

Telephone No.

718-445-7900
800-328-0142
Fax: 718-353-5998

Emergency 24 HR response No: 1-800-424-9300 & 703-527-3887 CHEMTREC

Note: The CHEMTREC phone number is only for emergencies involving spills, leaks, fire, exposure or accident. Please direct all other inquiries to our customer service phone number.

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Corr Metals.1; H290

May be corrosive to metals

Skin corrosion.1A; H314

Causes skin burns and eye damage.

Eye Dam. 1;

Specific target organ toxicity

- single exposure 3,

May cause respiratory irritation.

Respiratory system, H335

Specific target organ toxicity

- repeated exposure. 1;

Causes damage to organs through prolonged or repeated exposure

H372

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



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Signal Word

Warning

[Hazard statement] (s)

H290 May be corrosive to metals

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

H372 Causes damage to organs through prolonged or repeated exposure.

[Prevention]:

If medical advice is needed, have product container or label at hand.

Keep out of reach of children

Read label before use

P234 Keep only in original container

P261 Do not breathe dust/fume/gas/mist/vapors/spray

Do not eat, drink or smoke when using this product

P271 Use only outdoors or in a well-ventilated area

P 280 Wear protective gloves/protective clothing/eye protection/face protection

P264 Wash skin thoroughly after handling

[Response]:

P301+P330+P331 If swallowed: Rinse mouth. Do not induce vomiting

P303 + P361 + P353 If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P300+P330 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P305 + P351 + P338 + P310 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/physician

Specific treatment (see supplemental first aid instructions on this label)

P363 Wash contaminated clothing before reuse

P390 Absorb spillage to prevent material damage

[Storage]:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed

P405 Store locked up

P406 Store in corrosive resistant stainless-steel container with a resistant inner liner

[Disposal]:

P501 Dispose of contents and container as instructed in Section 13

2.3 Hazards not otherwise classified (HNOC)

None

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

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Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
SODIUM SILICATE CAS#: 1344-09-8	100	Corr to metals. 1; H290 Skin Corr. 1A; H314 Eye Dam. 1 STOT SE 3, H335 Resp STOT RE 1; H372	

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

*The full texts of the phrases are shown in Section 16.

4.1. Description of first aid measures

General	First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.
Inhalation	Loosen clothing as necessary and position individual in a comfortable position. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Immediately get medical assistance.
Eyes	Protect unexposed eye. Rinse or flush exposed eye gently using water for 15-20 minutes. Remove contact lenses while rinsing. Immediately get medical assistance.
Skin	Wash hands and exposed skin with soap and plenty of water. Seek medical attention if irritation persists or if concerned.
Ingestion	Induce vomiting if directed to do so by medical personnel. Dilute mouth with water or milk after rinsing. Immediately get medical assistance.

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

Irritation, nausea, headache, shortness of breath.

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

Provide SDS document to physician. Physician should treat symptomatically.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media

Nonflammable. Use any means suitable for extinguishing surrounding fire.

5.2 Special hazards arising from the substance or mixture

Combustion products may include carbon oxides or other toxic vapors.

5.3 Advice for firefighters

Protective equipment: Wear protective eye wear, gloves, and clothing. Refer to Section 8.

Additional information (precautions): Avoid contact with skin, eyes, and clothing. Ensure adequate ventilation.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

6.2. Environmental precautions

Collect contaminated soil for characterization per Section 13.

6.3. Methods and material for containment and cleaning up

Dilute with water and absorb with suitable material and containerize for disposal. If necessary, neutralize with dilute acetic acid solution. Avoid runoff into sewer. Always obey local regulations.

6.4 Reference to other sections

No additional information available

7. Handling and storage

7.1. Precautions for safe handling

Avoid breathing vapors, mist, or gas. Use only in well ventilated areas. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Wash hands and exposed skin with soap and plenty of water.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a cool, dry, and well-ventilated area. Store away from incompatible materials. Store away from food.

7.3. Specific end use(s)

No additional information available

8. Exposure controls and personal protection

8.1. Control parameters

Exposure



Control Parameters:

7631-86-9, Silicon dioxide, USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts: 20 million particles per cubic foot 7631-86-9, Silicon dioxide, USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts: 80mg/m³ / %SiO₂ 7631-86-9, Silicon dioxide, USA. NIOSH Recommended Exposure Limits: 6 mg/m³ 1310-73-2, Sodium hydroxide, USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000: 2 mg/m³ 1310-73-2, Sodium hydroxide, USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants: 2 mg/m³ 1310-73-2, Sodium hydroxide, USA. ACGIH Threshold Limit Values (TLV): 2 mg/m³ 1310-73-2, Sodium hydroxide, USA. NIOSH Recommended Exposure Limits: 2 mg/m³

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Appropriate Engineering controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Respiratory protection: Use under a fume hood.

Protection of skin: Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Eye protection: Safety glasses with side shields or goggles.

General hygienic measures: Avoid contact with the eyes and skin. Wash hands and exposed skin with soap and plenty of water. Wash hands before breaks and immediately after handling the product. Do not eat, drink, smoke, or use personal products when handling chemical substances.

9. Physical and chemical properties

Appearance	Clear Liquid
Odor	Slight soapy odor
Odor threshold	No data available
pH	12.5
Melting point/Freezing point	-1°C
Freezing point	No data available
Boiling point	101-102 °C
Flash Point	No data available
Evaporation rate (Ether = 1)	>1
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: 135C(275F): NA Upper Explosive Limit: 199C(390F): NA
Vapor pressure (Pa)	Not Applicable
Relative vapour density at 20 °C	No information
Relative density	1.390 g/cm ³ at 20°C
Density	No information
Solubility in Water	Complete
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity (cSt)	No data available
Viscosity, kinematic	No data available

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Viscosity, dynamic	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Volatiles (% by weight)	NA
Octanol/Water Partition Coefficient	NA

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Non-reactive under normal processing.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

Excessive heat. Incompatible materials.

10.5. Incompatible materials

Gels when mixed with acids.

10.6. Hazardous decomposition products

Contact with acids will cause gelling of the silicate and the evolution of some heat.

11. Toxicological information

Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
SODIUM SILICATE (1344-09-8)	1960mg/kg	>5000 mg/kg	>2.06 g/m ³	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	4	Not Applicable
Skin corrosion/irritation	---	Causes severe skin burns and eye damage. pH: 11.2

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Serious eye damage/irritation	---	Serious eye damage, category 1, implicit pH: 11.2
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Mutagenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	May cause respiratory irritation.
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr. LC50 fish, mg/l	48 hr. EC50 crustacea, mg/l	ErC50 algae, mg/l
SODIUM SILICATE (1344-09-8)	1108 mg/l	1700 mg/l	0.042 mg/L

12.2. Persistence and degradability

Readily degradable in the environment.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

: Aqueous solution has high mobility in soil.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal, state, provincial, and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

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14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	3266	3266	3266
14.2. UN proper shipping name	Corrosive liquid, Basic, Inorganic, N.O.S.	Corrosive liquid, Basic, Inorganic, N.O.S.	Corrosive liquid, Basic, Inorganic, N.O.S.
14.3. Transport hazard class(es)	DOT Hazard Class: UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., 8, III,	IMDG: UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., 8, III,	Air Class: UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., 8, III,
14.4. Packing group	III	III	III
14.5. Environmental hazards			
IMDG	Marine Pollutant: No		
14.6. Special precautions for user			

15. Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute, Chronic

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients is listed

RCRA (hazardous waste code):

None of the ingredients is listed

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients is listed

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

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None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients is listed

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The opinions expressed are those of qualified experts within ComStar International Inc. We believe that the information contained is current as of the date of the Safety Data Sheet. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of ComStar International Inc., it is the user's obligation to determine the conditions of safe use of the product.

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