

Safety Data Sheet

LIQUID PLUG

SDS Revision Date:

12/12/2022



1. Identification

1.1. Product identifier

Product Identity

LIQUID PLUG

Alternate Names

40-135, Blended Formula, LIQUID PLUG Liquid Boiler Leak Sealant- 1 qt

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

Intended use

General purpose industrial chemical for use in a wide range of applications. Binding agent; Corrosion inhibitor; Dust binding agent; Flame retardant or fire preventing agent; Flotation agent; Stabilizer; Viscosity control agent.

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.
20-47 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

Skin Irrit. 2; H315 Causes skin irritation

Eye Irrit. 2; H319 Causes eye irritation

2.2. Label elements

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



Signal word

Warning

[Prevention]:

P262: Do not get in eyes, on skin, or on clothing

P280: Wear protective gloves/protective clothing/eye protection/face protection.

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

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P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

[Response]:

P312: Call a poison center or doctor / physician if you feel unwell.

P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.

[Storage]:

No GHS storage statements

[Disposal]:

No GHS disposal statements

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.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
SODIUM SILICATE N SOLUTION CAS#: 1344-09-8	>50	Skin Irrit. 2 Eye Irrit. 2	
MORPHOLINE CAS#: 110-91-8	<10	Flam liquids 3 Acute toxicity, Oral 4 Acute toxicity, Dermal 3 Skin corrosion 1B Serious eye damage 1	
QUEBRACHO CAS#: 1401-55-4	<10	Not Classified	

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. First aid measures

4.1. Description of first aid measures

General

In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation

Remove patient from exposure, keep warm and at rest. Obtain medical attention.

Eyes

Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Obtain immediate medical attention.

Skin

Wash affected skin with plenty of water. If symptoms develop, obtain medical attention.

Ingestion

Do not induce vomiting. Wash out mouth with water and give 200- 300 ml (half a pint) of water to drink. Obtain medical attention.

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

Overview

Alkaline. Irritating to eyes and skin. The toxicity of sodium silicate is dependent on the silica to alkali ratio and on the pH.

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

5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Compatible with all standard firefighting techniques

Unsuitable extinguishing Media

None known.

5.2. Special hazards arising from the substance or mixture

Not applicable. Aqueous solution. Non-combustible

5.3. Advice for fire-fighters

None

ERG Guide No. ---

6. Accidental release measures

6.1. Personal precautions, protective equipment, and emergency procedures

Wear suitable protective clothing. Wear eye/face protection.

6.2. Environmental precautions

Do not allow to enter drains, sewers, or watercourses. Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

6.3. Methods and material for containment and cleaning up

Caution - spillages may be slippery. Contain spillages with sand, earth, or any suitable adsorbent material. Transfer to a container for disposal or recovery.

6.4 Reference to other sections

See Also Section 8.

7. Handling and storage

7.1. Precautions for safe handling

Avoid contact with eyes, skin, and clothing. Avoid generation of mist. Provide adequate ventilation. Emergency shower and eye wash facilities should be readily available. See Also Section 8

7.2. Conditions for safe storage, including any incompatibilities

Store at temperature below 60°C/140°F Do not allow material to freeze. Provide an adequate bund wall. Unsuitable containers: Aluminum See Also Section 10.

7.3. Specific end use(s)

See also Annex to the extended Safety Data Sheet.

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8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
1344-09-8	SODIUM SILICATE	OSHA	2 mg/m ³ , 8 hr TWA
		ACGIH	2 mg/m ³
		NIOSH	No Established Limit
		Supplier	No Established Limit
110-91-8	MORPHOLINE	OSHA	79 mg/m ³
		ACGIH	No Established Limit
		NIOSH	TWA 20 ppm (70 mg/m ³) ST 30 ppm (105 mg/m ³) [skin]
		Supplier	No Established Limit
1398-11-4	QUEBRACHO	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
1344-09-8	SODIUM SILICATE	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
110-91-8	MORPHOLINE	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
1398-11-4	QUEBRACHO	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

8.2. Exposure controls

Respiratory

Respiratory protection not normally required. Advice on respiratory protective equipment is given in the HSE (Health and Safety Executive) publication HS(G)53.

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Eyes	Chemical goggles (EN 166).
Skin	Wear suitable protective clothing and gloves. Plastic or rubber gloves. For example EN374-3, level 6 breakthrough time (>480min). Wear suitable overalls.
Engineering Controls	Wear protective equipment to comply with good occupational hygiene practice. Do not eat, drink, or smoke at the work place. Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.
8.3. Environmental Exposure Controls	The primary hazard of sodium silicate is the alkalinity. Avoid release to the environment.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance	Brownish Liquid
Odor	Odorless
Odor threshold	Not Measured
pH	Alkaline. 11-12
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	100
Flash Point	None
Evaporation rate (Ether = 1)	Not Measured
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.
Density	1.39 g/cm ³ (20°C), 41° Bé, 11.62 lbs/gal
Specific Gravity	Not applicable.
Solubility in Water	Complete
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not Measured
Viscosity (cSt)	Not applicable.
Volatiles (% by weight)	NA
Octanol/Water Partition Coefficient	NA
9.2. Other information	No other relevant information.

10. Stability and reactivity

10.1. Reactivity

See Section: 10.3

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10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

When arc welding vessels containing aqueous solutions of this material, take care to control any explosion risk from hydrogen evolved by electrolysis. Aqueous solutions will react with aluminum, zinc, tin and their alloys evolving hydrogen gas which can form an explosive mixture with air. Can react violently if in contact with acids. Can react with sugar residues to form carbon monoxide.

10.4. Conditions to avoid

See Section: 10.3

10.5. Incompatible materials

See Section: 10.3

10.6. Hazardous decomposition products

None known.

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)	3400 mg/kg, Rat	>5000 mg/kg, Rat	>2.06 mg/L	No data available	20000 ppm, Rat
MORPHOLINE (110-91-8)	1,450 mg/kg, Rat	500 mg/kg, Rabbit	No data available	No data available	8000 ppm, 8hr
QUEBRACHO (1398-11-4)	No data available	No data available	No data available	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)	---	Not Applicable
Skin corrosion/irritation	---	Irritating to skin.
Serious eye damage/irritation	---	Irritating to eyes.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable

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Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
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	Not Available
MORPHOLINE (110-91-8)	180 - 380 mg/l	200 mg/l	> 310 mg/l
QUEBRACHO (1398-11-4)	Not Available	Not Available	Not Available

12.2. Persistence and degradability

Inorganic. Soluble silicates, upon dilution, rapidly depolymerize into molecular species indistinguishable from natural dissolved silica.

12.3. Bioaccumulative potential

Inorganic. The substance has no potential for bioaccumulation.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

The alkalinity of this material will have a local effect on ecosystems sensitive to changes in pH.

13. Disposal considerations

13.1. Waste treatment methods

Dispose of this material and its container to hazardous or special waste collection point. Disposal should be in accordance with local, state, or national legislation.

14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Applicable	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated

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14.3. Transport hazard class(es)	DOT Hazard Class: Not Applicable	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable
14.5. Environmental hazards			
IMDG	Marine Pollutant: No		
14.6. Special precautions for user			
No further information			

15. Regulatory information

Regulatory Overview	The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.		
Toxic Substance Control Act (TSCA)	All components of this material are either listed or exempt from listing on the TSCA Inventory.		
WHMIS Classification	Not Regulated		
US EPA Tier II Hazards	Fire: No	Sudden Release of Pressure: No	Reactive: No
	Immediate (Acute): No	Delayed (Chronic): No	

EPCRA 311/312 Chemicals and RQs:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

MORPHOLINE

Pennsylvania RTK Substances (>1%):

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.

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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 Material 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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