

SAFETY DATA SHEET

Version 1

Revision Date 04-Feb-2015 Issue Date 04-Feb-2015 **1. PRODUCT AND COMPANY IDENTIFICATION** Product identifier **Product Name** LIQUID METAL SAFE Other means of identification **Product Code** SS 5535 UN/ID No. UN1760 Recommended use of the chemical and restrictions on use **Recommended Use** Detergent. Uses advised against Use only as stated on label. Details of the supplier of the safety data sheet Supplier Suburban Supply 29 Kearney Road Needham, MA 02194 Phone: (781) 449-1042

Emergency telephone number Emergency Telephone

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1

Label elements

	Emergency Overview	
	Danger	
	Hazard statements	
	Causes severe skin burns and eye damage	
Appearance Colorless	Physical state Liquid	Odor Odorless

Precautionary Statements - Prevention

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

Precautionary Statements - Response

Specific Treatment (See Section 4 on the SDS) 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 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse Immediately call a POISON CENTER or doctor/physician IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Immediately call a POISON CENTER or doctor/physician IF SWALLOWED: Rinse mouth. DO NOT induce vomiting Immediately call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other Information Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Sodium Silicate	1344-09-8	10-30	*
Sodium Hydroxide	1310-73-2	3-7	*
Tetrasodium EDTA	64-02-8	1-5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures	
General advice	Immediate medical attention is required.
Skin Contact	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. For minor skin contact, avoid spreading material on unaffected skin. For severe burns, immediate medical attention is required.
Eye contact	Immediate medical attention is required Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Keep eye wide open while rinsing Do not rub affected area Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes
Inhalation	Remove to fresh air. Call a physician or poison control center immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Ingestion	Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Remove from exposure, lie down. Clean mouth with water and drink afterwards plenty of water. Call a physician or poison control center immediately.

Self-protection of the first aider Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms No Information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Explosion data Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.	
Environmental precautions		
Environmental precautions	Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.	
Methods and material for containment and cleaning up		
Methods for containment	Prevent further leakage or spillage if safe to do so.	
Methods for cleaning up	Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Prevent product from entering drains. Dam up. After cleaning, flush away traces with water.	

7. HANDLING AND STORAGE

Precautions for safe handling

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Advice on safe handling	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems.
Conditions for safe storage, in	ncluding any incompatibilities
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.
Incompatible materials	Strong acids. Aluminum. Incompatible with strong acids and bases. Incompatible with oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous mate exposure limits established by the region specific regulatory boo		•		
	Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
	Codium Lludrovido	Colling: 2 mg/m3	$T \setminus A \land A = 2 - m \pi / m^3$	IDI 11: 10 mg/m3

Chemical Name	ACOILLY	USHATEL	NIOSITIDEIT
Sodium Hydroxide	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³	IDLH: 10 mg/m ³
1310-73-2		(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³
		•	

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information	Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962
	(11th Cir., 1992).

Appropriate engineering controls

Engineering Controls	Showers, Eyewash stations & Ventilation systems.	
Individual protection measures, su	ch as personal protective equipment	
Eye/face protection	Tight sealing safety goggles. Face protection shield.	
Skin and body protection	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.	
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.	
General Hygiene	When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance Odor	Liquid Colorless Odorless	Odor threshold	No Information available
<u>Property</u> pH Melting point/freezing point	<u>Values</u> 13.0 + No Information available	Remarks • Method	

SS 5535 LIQUID METAL SAFE

Boiling point / boiling range Flash point	No Information available None
Evaporation rate	No Information available
Flammability (solid, gas)	No Information available
Flammability Limits in Air	
Upper flammability limit:	No Information available
Lower flammability limit:	No Information available
Vapor pressure	No Information available
Vapor density	No Information available
Specific Gravity	1.2
Water solubility	Complete
Solubility in other solvents	No Information available
Partition coefficient	No Information available
Autoignition temperature	No Information available
Decomposition temperature	No Information available
Kinematic viscosity	No Information available
Viscosity	No Information available
Explosive properties	No Information available
Oxidizing properties	No Information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Exposure to air or moisture over prolonged periods.

Incompatible materials

Strong acids. Aluminum. Incompatible with strong acids and bases. Incompatible with oxidizing agents.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information The primary effects and toxicity of this material are due to it corrosive nature.

Inhalation No data available.

Eye contact No data available.

Skin Contact No data available.

Ingestion No data available.

Chemical Name	mical Name Oral LD50		Inhalation LC50
Water > 90 mL/kg (Rat)		Yes	Yes
732-18-5			
Sodium Silicate	= 1153 mg/kg (Rat)	> 4640 mg/kg (Rabbit)	Yes
1344-09-8			
Sodium Hydroxide	Yes	= 1350 mg/kg (Rabbit)	Yes
1310-73-2			

Tetrasodium EDTA	= 10 g/kg (Rat) = 1658 mg/kg (Yes	Yes
64-02-8	Rat)		

Information on toxicological effects

Symptoms

No Information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization Germ cell mutagenicity Carcinogenicity Reproductive toxicity STOT - single exposure STOT - repeated exposure Chronic toxicity	No Information available. No Information available. No Information available. No Information available. No Information available. No Information available. Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are
Target organ effects Aspiration hazard	common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risk of irreversible effects. EYES, Respiratory system, Skin. No Information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity **The following values are calculated based on chapter 3.1 of the GHS document**.

12. ECOLOGICAL INFORMATION

Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name Algae/aquatic plants		Fish	Crustacea	
Sodium Silicate 1344-09-8	Yes	301 - 478: 96 h Lepomis macrochirus mg/L LC50 3185: 96 h Brachydanio rerio mg/L LC50 semi-static	216: 96 h Daphnia magna mg/L EC50	
Sodium Hydroxide 1310-73-2	Yes	45.4: 96 h Oncorhynchus mykiss mg/L LC50 static	Yes	
Tetrasodium EDTA 64-02-8	Tetrasodium EDTA 1.01: 72 h Desmodesmus		610: 24 h Daphnia magna mg/L EC50	

Persistence and degradability

No Information available.

Bioaccumulation

No Information available.

Other adverse effects

No Information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods			
Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.		
Contaminated packaging	Do not reuse container.		
US EPA Waste Number	D002		

14. TRANSPORT INFORMATION

DOT

UN/ID No.UN1760Proper shipping nameCorrosive liquids, n.o.s.Hazard Class8Packing GroupIISpecial ProvisionsB2, IB2, TII, TP2, TP27DescriptionUN1760, Corrosive liquids, n.o.s. (Sodium Hydroxide), 8, IIEmergency Response Guide154

15. REGULATORY INFORMATION

International Inventories	
TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium Hydroxide 1310-73-2	1000 lb	Yes	Yes	Х

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sodium Hydroxide	1000 lb	Yes	RQ 1000 lb final RQ
1310-73-2			RQ 454 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name New Jersey		Massachusetts	Pennsylvania	
	Sodium Hydroxide	X	X	Х
	1310-73-2			

U.S. EPA Label Information

No Information available

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION					
<u>NFPA</u>	Health hazards 3	Flammability 0	Instability 0	Physical and Chemical Properties Yes	
HMIS	Health hazards 3	Flammability 0	Physical hazards 0	Personal protection N/A	
Issue Date Revision Date Revision Note	sion Date 04-Feb-2015				

Disclaimer The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet