

Safety Data Sheet

COMMERCIAL LYE

SDS Revision Date:

1/26/2023



1. Identification

1.1. Product identifier

Product Identity

COMSTAR COMMERCIAL LYE

Alternate Names

30-620, Blended Formula, Commercial Lye, Bead Size Drain Opener with Blue Dye- 2 lb.

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

For Intended Use

It is used to open drains. Its non-acid beads make it easy to pour down screened drains. It contains blue dye for easy flow detection. Fast, safe, non-acid, non-fuming. Safe in all pipes.

Application method

Read all precautions and instruction 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 Corr 1B; H314 Causes severe skin burns and eye damage.

Eye Dam. 1; H318 Causes serious eye damage.

Hazardous to the aquatic environment- Acute Hazard Harmful to aquatic life Category 3; H402

2.2. Label elements

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



Warning

[Hazard Statement]:

Safety Data Sheet

COMMERCIAL LYE

SDS Revision Date:

1/26/2023



H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H402 Harmful to aquatic life

[Prevention]:

P260 Do not breathe mist / vapors / spray.

P264 Wash exposed skin thoroughly after handling.

P273 Avoid release to the environment

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P301+330+331 If swallowed: Rinse mouth. Do not induce vomiting.

P303+361 +353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304+340 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351 +338 If in eyes: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P310 Immediately call a poison center or doctor / physician.

P363 Wash contaminated clothing before reuse.

[Storage]:

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Skin Corr 1B; H314 Causes severe skin burns and eye damage.

Eye Dam. 1; H318 Causes serious eye damage.

Hazardous to the aquatic environment- Acute Hazard Category 3; H402 Harmful to aquatic life

2.2. Label elements

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



Safety Data Sheet

COMMERCIAL LYE

SDS Revision Date:

1/26/2023



Warning

[Hazard Statement]:

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H402 Harmful to aquatic life

[Prevention]:

P260 Do not breathe mist / vapors / spray.

P264 Wash exposed skin thoroughly after handling.

P273 Avoid release to the environment

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P301+330+331 If swallowed: Rinse mouth. Do not induce vomiting.

P303+361 +353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304+340 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351 +338 If in eyes: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P310 Immediately call a poison center or doctor / physician.

P363 Wash contaminated clothing before reuse.

[Storage]:

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

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.

3.1. Substances

Substance type: Mono-constituent

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
SODIUM HYDROXIDE SOLID CAS #: 1310-73-2	99.9%	Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402	
FOOD GRADE BLUE DYE CAS# N/A	<1		

Safety Data Sheet

COMMERCIAL LYE

SDS Revision Date:

1/26/2023



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

4. First aid measures

4.1. Description of first aid measures

General	Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with labored breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
Inhalation	Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
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.
Skin	Wash immediately with lots of water (15 minutes)/shower. Do not apply (chemical) neutralizing agents. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician.
Ingestion	Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Do not give activated charcoal. Do not give chemical antidote. Immediately consult a doctor/medical service. Call Poison Information Centre (www.big.be/antigif.htm). Take the container/vomit to the doctor/hospital. Ingestion of large quantities: immediately to hospital. Rinse mouth. Do not induce vomiting. Immediately call a poison center or doctor/physician.

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

Overview	On continuous/repeated exposure/contact: Dry skin. Skin rash/inflammation. Possible inflammation of the respiratory tract.
Inhalation	Exposure to high concentrations: Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Following symptoms may appear later: Possible laryngeal spasm/oedema. Risk of lung edema. Respiratory difficulties.
Symptoms/effects after skin contact	Caustic burns/corrosion of the skin. Slow-healing wounds.
Symptoms/effects after eye contact	Corrosion of the eye tissue. Permanent eye damage. Causes serious eye damage
Symptoms/effects after ingestion	Vomiting. Diarrhea. Burns to the gastric/intestinal mucosa. Possible esophageal perforation. Bleeding of the gastrointestinal tract. Shock. After absorption of large quantities: Disturbances of consciousness.
Symptoms/effects	Causes severe skin burns and eye damage.

Safety Data Sheet

COMMERCIAL LYE

SDS Revision Date:

1/26/2023



4.3. Immediate medical attention and special treatment, if necessary

No additional information available

5. Fire-fighting measures

5.1. Extinguishing media

Extinguishing media for surrounding fires: Adapt extinguishing media to the environment. Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media

Solid water jet ineffective as extinguishing medium.

5.2. Special hazards arising from the substance or mixture

Fire hazard

Direct fire hazard. Noncombustible.

Indirect fire hazard. Reactions involving a fire hazard: see "Reactivity Hazard".

Explosion hazard

Indirect explosion hazard. Reactions with explosion hazards: see "Reactivity Hazard".

Reactivity

Violent exothermic reaction with water (moisture): (increased) risk of fire. On heating: release of corrosive gases/vapors. Absorbs the atmospheric CO₂. Violent exothermic reaction with (some) acids. May be corrosive to metals. Reacts with (some) metals: release of highly flammable gases/vapors (hydrogen)

5.3. Special protective equipment and precaution for fire-fighters

Precautionary measures fire

Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighborhood close doors and windows.

Firefighting instructions

Cool tanks/drums with water spray/remove them into safety. Dilute toxic gases with water spray. Take account of toxic fire-fighting water. Use water moderately and if possible, collect or contain it.

Protection during firefighting

Heat/fire exposure: compressed air/oxygen apparatus.

ERG Guide No. ---137

6. Accidental release measures

6.1. Personal precautions, protective equipment, and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment

Gloves. Face-shield. Corrosion-proof suit. Large spills/in enclosed spaces: compressed air apparatus. Large spills/in enclosed spaces: gas-tight suit. See "Material-Handling" to select protective clothing.

Emergency procedures

Safety Data Sheet

COMMERCIAL LYE

SDS Revision Date:

1/26/2023



Mark the danger area. No naked flames. Wash contaminated clothes. Large spills/in confined spaces: consider evacuation. In case of hazardous reactions: keep upwind. In case of reactivity hazard: consider evacuation.

6.1.2. For emergency responders

Protective equipment:

Equip cleanup crew with proper protection

Emergency procedures:

Ventilate area

6.2. Environmental precautions

Prevent soil and water pollution. Prevent spreading in sewers. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment

Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Dam up the liquid spill. Hazardous reaction: measure explosive gas-air mixture. Reaction: dilute combustible gas/vapour with water curtain. Heat exposure: dilute toxic gas/vapour with water spray. Take account of toxic/corrosive precipitation water

Methods for cleaning up

Take up liquid spill into absorbent material, e.g.: sand, saw dust, kieselguhr. Scoop absorbed substance into closing containers. See "Material-handling" for suitable container materials. Carefully collect the spill/leftovers. Small quantities of liquid spill: neutralize with acid solution. Wash away neutralized product with plentiful water. Damaged/cooled tanks must be emptied. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

7. Handling and storage

7.1. Precautions for safe handling

Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Handle and open the container with care. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Keep away from naked flames/heat. Observe very strict hygiene - avoid contact. Keep container tightly closed. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

Hygiene measures

Wash exposed skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

Comply with applicable regulations.

Storage conditions

Keep only in the original container in a cool, well-ventilated place away from: incompatible materials. Keep container closed when not in use.

Incompatible products

Strong bases. Strong acids.

Safety Data Sheet

COMMERCIAL LYE

SDS Revision Date:

1/26/2023



Incompatible materials

Sources of ignition. Direct sunlight.

Storage temperature

> 15 °C

Heat-ignition

Keep substance away from heat sources.

Prohibitions on mixed storage

Keep substance away from: combustible materials. strong acids. metals.

Storage area

Store in a dry area. Keep container in a well-ventilated place. Keep locked up. Protect against frost. Provide for a tub to collect spills. Unauthorized persons are not admitted. Meet the legal requirements

Special rules on packaging

Special requirements: hermetical. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packaging in solid containers.

Packaging materials

Suitable material: stainless steel. nickel. polyethylene. polypropylene. glass. stoneware/porcelain.

Material to avoid: lead. aluminum. copper. tin. zinc. bronze.

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

Sodium Hydroxide, 50% w/w (1310-73-2)

ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³ (Sodium hydroxide; USA; Momentary value; TLV - Adopted Value)
OSHA	OSHA PEL (TWA) (mg/m ³)	2 mg/m ³
IDLH	US IDHL (mg/m ³)	10 mg/m ³
NIOSH	NIOSH REL (ceiling) (mg/m ³)	2 mg/m ³

8.2. Appropriate engineering controls

Appropriate engineering controls Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation.

8.3. Exposure controls

Respiratory

Wear gas mask with filter type B if conc. in air > exposure limit

Safety Data Sheet

COMMERCIAL LYE

SDS Revision Date:

1/26/2023



Eyes	Safety glasses with side shields, goggles or face shield are recommended.
Skin	Corrosion-proof clothing
Hand protection:	Wear protective gloves.
Materials for protective clothing:	Give excellent resistance: nitrile rubber. Give good resistance: No data available: Give less resistance: chlorinated polyethylene. styrene-butadiene rubber. nitrile rubber/PVC. Give excellent resistance: PVA. natural fibers.
Other information:	Do not eat, drink, or smoke during use.
Personal protective equipment:	Protective goggles. Gloves. Protective clothing. Face shield.



9. Physical and chemical properties

Physical state	Solid
Appearance	Crystalline solid. Crystalline powder. Little spheres. Lumps. Needles. Scales. Flakes.
Color	White
Odor	odorless
Odor threshold	No data available
pH	ca.> 14 at 100 g/l at 20 °C (68 °F)
Melting point/Freezing point	318 °C (604 °F)
Boiling point	1,390 °C 2,534 °F at 1,013 hPa
Flash Point	Not applicable
Evaporation rate (Ether = 1)	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	Lower Explosive Limit: 135C(275F): NA Upper Explosive Limit: 199C(390F): NA
Vapor pressure	No data available
Vapor Density	1.38- (Air = 1.0)
Relative density	No data available
Density	2.13 g/cm ³ at 20 °C (68 °F)
Molecular mass	No data available
Solubility	1,090 g/l at 20 °C (68 °F)
Partition coefficient n-octanol/water (Log Kow)	No data available
Auto-ignition temperature	Not applicable

Safety Data Sheet

COMMERCIAL LYE

SDS Revision Date:

1/26/2023



Decomposition temperature	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive limits	No data available
Explosive properties	No data available
Oxidising properties	None

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Violent exothermic reaction with water (moisture): (increased) risk of fire. On heating: release of corrosive gases/vapours. Absorbs the atmospheric CO₂. Violent exothermic reaction with (some) acids. May be corrosive to metals. Reacts with (some) metals: release of highly flammable gases/vapours (hydrogen)

10.2. Chemical stability

Stable under normal circumstances. Absorbs atmospheric CO₂ Hygroscopic. Not established.

10.3. Possibility of hazardous reactions

Not established

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. metals

10.6. Hazardous decomposition products

Sodium oxide. Thermal decomposition generates: Corrosive vapors

11. Toxicological information

Acute toxicity

Ingredient	Oral LD50, mg/kg	Dermal LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
SODIUM HYDROXIDE (1310-73-2)	No data available	1350 mg/kg body weight	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
----------------	----------	--------------------

Safety Data Sheet

COMMERCIAL LYE

SDS Revision Date:

1/26/2023



Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	1B	Causes severe skin burns and eye damage. Ph: 14 (8%)
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable Based on available data, the classification criteria are not met.
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable
Potential Adverse human health effects and symptoms	---	Based on available data, the classification criteria are not met
Symptoms/effects after inhalation	---	Exposure to high concentrations: Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Following symptoms may appear later: Possible laryngeal spasm/oedema. Risk of lung edema. Respiratory difficulties
Symptoms/effects after skin contact	---	Caustic burns/corrosion of the skin. Slow-healing wounds.
Symptoms/effects after eye contact	---	Corrosion of the eye tissue. Permanent eye damage. Causes serious eye damage
Symptoms/effects after ingestion	---	Vomiting. Diarrhea. Burns to the gastric/intestinal mucosa. Possible esophageal perforation. Bleeding of the gastrointestinal tract. Shock. After absorption of large quantities: Disturbances of consciousness
Chronic symptoms		On continuous/repeated exposure: Dry skin. Skin rash/inflammation. Possible inflammation of the respiratory tract.

12. Ecological information

12.1. Toxicity

Ecology – general: Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.

Safety Data Sheet

COMMERCIAL LYE

SDS Revision Date:

1/26/2023



Ecology – air: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EC) No 842/2006).

Ecology - water: Ground water pollutant. Maximum concentration in drinking water: 200 mg/l (sodium) (Directive 98/83/EC). Harmful to fishes. Harmful to invertebrates (Daphnia). pH shift.

Aquatic Ecotoxicity

LC50 fish 1: 45.4 mg/l (LC50; Other; 96 h; Salmo gairdneri; Static system; Fresh water; Experimental value.

Ingredient	96 hr. LC50 fish, mg/l	48 hr. EC50 crustacea, mg/l	ErC50 algae, mg/l
SODIUM HYDROXIDE (1310-73-2)	Not Available	Not Available	Not Available

12.2. Persistence and degradability

Biodegradability: not applicable. No test data on mobility of the components available

Biochemical oxygen demand (BOD)

Not applicable

Chemical oxygen demand (COD)

Not applicable

ThOD

Not applicable

12.3. Bioaccumulative potential

Not Measured

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

Avoid release to the environment.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state, and local regulations when disposing of this substance.

Waste disposal recommendations

Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed with other waste. Different types of hazardous waste shall not be mixed if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport, or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle/reuse. Remove for physico-chemical/biological treatment. Do not discharge into drains or the environment.

Additional information

Safety Data Sheet

COMMERCIAL LYE

SDS Revision Date:

1/26/2023



Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

Ecology- waste materials

Avoid release to the environment

14. Transport information

NOTE: Containers holding less than 1 kilo (2.2 lbs.) are shipped as non-hazardous LTD QTY.

Department of Transportation (DOT)

In accordance with DOT

Transport document description:

UN1824 Sodium hydroxide solution, 8, II

UN-No. (DOT)

UN1824

Proper Shipping Name (DOT)

Sodium hydroxide solution

Transport hazard class(es) (DOT)

8 - Class 8 - Corrosive material 49 CFR

173.136

Packing group (DOT)

II - Medium Danger

Hazard labels (DOT)

8 - Corrosive



DOT Packaging Non Bulk (49 CFR 173.xxx)

202

DOT Packaging Bulk (49 CFR 173.xxx)

242

DOT Special Provisions (49 CFR 172.102)

B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). 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. N34 - Aluminum construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material. T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3) TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by

Safety Data Sheet

COMMERCIAL LYE

SDS Revision Date:

1/26/2023



the following: (image) Where: t_r is the maximum mean bulk temperature during transport, t_f is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (t_f) and the maximum mean bulk temperature during transportation (t_r) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d_{15} and d_{50} are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

DOT Packaging Exceptions (49 CFR 173.xxx)	154
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	30 L
DOT Vessel Stowage Location "on deck" or and on a passenger	A - The material may be stowed "under deck" on a cargo vessel vessel.
DOT Vessel Stowage Other	52 - Stow "separated from" acids
Other information available.	No supplementary information

DOT Packaging Non Bulk (49 CFR 173.xxx) : 202

DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Special Provisions (49 CFR 172.102) : B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). 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. N34 - Aluminum construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material. T7 - 4 178.274(d)(2) Normal.....
178.275(d)(3) TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: t_r is the maximum mean bulk temperature during transport, it is the temperature in degrees Celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (t_f) and the maximum mean bulk temperature during transportation (t_r) both in degrees Celsius. b. For liquids transported under

Safety Data Sheet

COMMERCIAL LYE

SDS Revision Date:

1/26/2023



ambient conditions may be calculated using the formula: (image) Where: d_{15} and d_{50} are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

DOT Packaging Exceptions (49 CFR 173.xxx) : 154

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 1 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75): 30 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: 52 - Stow "separated from" acids other information: No supplementary information available

15. Regulatory information

15.1. US Federal regulations

Sodium Hydroxide (1310-73-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb
SARA Section 311/312 Hazard Classes	Health hazard - Skin corrosion or Irritation Health hazard - Serious eye damage or eye irritation

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Sodium Hydroxide (1310-73-2)

RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

15.2. International regulations

CANADA

Sodium Hydroxide (1310-73-2)

Listed on the Canadian DSL (Domestic Substances List)

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

Safety Data Sheet

COMMERCIAL LYE

SDS Revision Date:

1/26/2023



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 full text of the phrases appearing in section 3 is:

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

H402 Harmful to aquatic life

NFPA health hazard	3 - Materials that, under emergency conditions, can cause serious or permanent injury.
NFPA fire hazard	0 - Materials that will not burn under typical dire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity	1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.



Hazard Rating	3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
Health	
Flammability	0 Minimal Hazard - Materials that will not burn
Physical	1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.
Personal protection	H - Splash goggles, Gloves, Synthetic apron, Vapor respirator

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.

End of Document