

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Liquid Urea 30%
CAS number	See section 3
Synonyms	Urea Solution; Urea liquor; Diesel Exhaust Fluid

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

Identified uses	Laboratory Chemicals
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1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Based on available data, the classification criteria are not met.

2.2 GHS Label elements, including precautionary statements

None required.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Urea	-	57-13-6	29-32%
Water	-	7732-18-5	66-71%
Ammonia	-	7664-41-7	≤0.15%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice	Show this sheet to a doctor if medical advice is needed.
If inhaled	Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
In case of skin contact	Remove contaminated clothing. Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists. Wash contaminated clothing before reuse.
In case of eye contact	Immediately flush with large amounts of water, including under the eyelids. If pain or irritation persists seek medical attention. Speed and thoroughness in rinsing eyes are important to avoid permanent injury.
If swallowed	Do not induce vomiting. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

May cause respiratory irritation. May cause skin irritation. May cause eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

If exposed and feeling unwell, seek medical advice (show the label where possible).

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media Do not use heavy water stream. Use of Heavy water stream of water may spread fire.

5.2 Specific hazards arising from the substance or mixture

None identified.

5.3 Special 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.

5.4 Further information

Flash Point No data available.

Autoignition Temperature No data available.

Explosion limits

Upper No data available.

Lower No data available.

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
1	0	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Equip Cleanup crew with proper protection.

6.2 Environmental precautions

Contain any spills to prevent migration and entry into sewers or streams. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3 Methods and materials for containment and cleaning up

Contain any spills to prevent migration and entry into sewers or streams. Clean up spills immediately and dispose of safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities as appropriate after a spill. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.4 Reference to other sections

Refer to protective measures listed in Sections 7 and 8. See section 13 for proper disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Store in compliance with all Federal, State, and local regulations. Store in a well-ventilated area, away from incompatible materials or sources of heat and ignition. Empty containers may contain residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flames, sparks or other sources of ignition; they may evolve noxious fumes.

Hygiene measures

Handle in accordance with good industrial hygiene and safety procedures. Practices Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Store in compliance with all Federal, State, and local regulations.

Incompatibilities

Nitric acid. Gallium. Perchlorates. Strong oxidizers. Caustic products. Alkalis.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Ammonia	TWA	25 ppm
	STEL	35 ppm

US. ACGIH Threshold Limit Values

Component	Type	Value
Ammonia	TWA	25 ppm
	STEL	35 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
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Ammonia	TWA STEL	25 ppm 35 ppm
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Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available but not required.

Personal protective equipment

Eye/face protection

Safety glasses.

Skin protection

Wear chemically resistant protective gloves.

Body Protection

General protective work clothing is recommended.

Respiratory protection

Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Control of environmental exposure

Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	Slight ammonia odor
Odor Threshold	No data available
pH	7.5-10
Melting Point/Range	11.5F
Boiling Point/Range	219°F
Evaporation Rate	No data available
Flammability (solid)	No data available
Flammability or explosive limit	

Upper	No data available
Lower	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Density	9.1 lb/gal @ 25 C
Solubility	Completely soluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No data available
Decomposition Temp	135°C (275°F) Urea
Viscosity	No data available
Molecular Formula	No data available
Molecular Weight	No data available
VOC Content(%)	No data available
Oxidizing properties	No data available

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Hazardous reactions will not occur under normal conditions.

10.2 Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4 Conditions to avoid

Avoid exposing containers to heat or flame. Keep separated from incompatible materials.

10.5 Incompatible materials

Nitric acid. Gallium. Perchlorates. Strong oxidizers. Caustic products. Alkalis.

10.6 Hazardous decomposition products

Ammonia. Nitrogen oxides.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Urea	Rat = 8471 mg/kg	-	-
Ammonia	-	-	Rat = 5.1 mg/l (exposure time 1 h) Rat = 2000 ppm/4h (exposure time 4 h)

Skin corrosion/irritation

No information available.

Serious eye damage/eye irritation

No information available.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

No components are listed as known or suspected human carcinogens.

Specific target organ toxicity - single exposure

No information available.

Specific target organ toxicity - repeated exposure

No information available.

Reproductive toxicity

No information available.

Chronic effects

No information available.

11.2 Additional Information

No information available.

SECTION 12: Ecological information

12.1 Toxicity

Urea

LC50 Fish 1 = 16200 -18300 mg/l (exposure time 96 h – Species: Poecilia reticulata)

EC50 Daphnia 1 = 3910 mg/l (exposure time 48 h – Species: Daphnia magna [static])

Ammonia

LC50 Fish 1 = 0.44 mg/l (exposure time 96 h – Species: Cyprinus carpio)

EC50 Daphnia 1 = 25.4 mg/l (exposure 48 h – Species: Daphnia magna)

LC50 Fish 2 = 0.26 - 4.6 mg/l (exposure 96 h – Species: Lepomis macrochirus)

12.2 Persistence and degradability

No information available.

12.3 Bio accumulative potential

Urea Log Pow = -1.59 (at 25°C). BCF < 10.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1 Waste Disposal Methods**

Dispose of waste material in accordance with all local, regional, national, and international regulations. Additional Information: Spilled chemical can be used as fertilizer.

SECTION 14: Transport information**DOT (US)**

UN Number	Not regulated
Proper Shipping name	Not regulated
Hazard Class	None
Packaging Group	Not regulated
Technical name	Urea Solution

IMDG

UN Number	Not regulated
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Proper Shipping name	Not regulated
Hazard Class	None
Packaging Group	Not regulated
Technical name	Urea Solution

IATA

UN Number	Not regulated
Proper Shipping name	Not regulated
Hazard Class	None
Packaging Group	Not regulated
Technical name	Urea Solution

SECTION 15: Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not listed/applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)

57-13-6

SARA 304 Emergency release notification

Ammonia = 100 lb RQ.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed/applicable.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Ammonia = 500 lb RQ.

SARA 311/312 Hazardous

Not listed/applicable.

SARA 313 (TRI reporting)

Not listed/applicable.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not listed/applicable.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not listed/applicable.

Safe Drinking Water Act

Ammonia = 100,000 lb RQ.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed/applicable.

US state regulations

US. Massachusetts RTK - Substance List

Not listed.

US. New Jersey Worker and Community Right-to-Know Act

Ammonia = Listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Ammonia = Listed.

California Proposition 65

Not listed.

SECTION 16: Other information

Date of Issue: 6/13/2025

SECTION 17: Disclaimer

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.