



UREA

SAFETY DATA SHEET

Date of Issue: 29/06/2019

1. Identification

ProductName Urea
CAS-No 57-13-6
Synonyms Carbamide
RecommendedUse Laboratorychemicals.
Usesadvisedagainst Food, drug, pesticide or biocidal productuse.
Details of the supplier of the safety data sheet

Company

Shri Shanti Laboratories,
Shri Shanti Niwas,
Gangashahar Road,Bikaner-334001

Emergency Telephone Number : +91-9571511119

2. Hazard(s) identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label Elements

None required

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Urea	57-13-6	>95

4. First-aid measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur. If not breathing, give artificial respiration.
Ingestion	Do NOT induce vomiting. Get medical attention if symptoms occur.
Most important symptoms and effects	None reasonably foreseeable.
Note to Physician	Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media	Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.
Unsuitable Extinguishing Media	No information available
Flash Point	No information available
Method-	No information available
Autoignition Temperature	No information 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

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrogen oxides (NO_x).

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.

NFPA

Health
0

Flammability
1

Instability
0

Physical hazards
N/A

6. Accidental release measures

Personal Precautions	Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.
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Urea

Environmental Precautions Should not be released into the environment. See Section 12 for additional Ecological Information.

Methods for Containment and Clean Up Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

7. Handling and storage

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Avoid contact with skin, eyes or clothing. Avoid dust formation. Protect from moisture.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures None under normal use conditions.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection No protective equipment is needed under normal use conditions.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Solid
Appearance	White
Odor	Ammonia-like
Odor Threshold	No information available
pH	7.5-9.5 10% aq. solution
Melting Point/Range	131 - 135 °C / 267.8 - 275 °F
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid, gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	1.25 mmHg @ 25 °C
Vapor Density	Not applicable
Specific Gravity	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	>132 °C
Viscosity	Not applicable
Molecular Formula	C H4 N2O
Molecular Weight	60.06

Urea

10. Stability and reactivity

ReactiveHazard	None known, based on informationavailable
Stability	Stable under normalconditions.
ConditionstoAvoid	Incompatible products. Excess heat. Avoid dust formation. Protect frommoisture.
IncompatibleMaterials	Strong oxidizingagents
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO ₂), Nitrogen oxides (NO _x)
HazardousPolymerization	Hazardous polymerization does notoccur.
HazardousReactions	None under normalprocessing.

11. Toxicological information

Acute Toxicity

Product Information Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Urea	LD50 = 8471 mg/kg (Rat)	Not listed	Not listed

Toxicologically Synergistic Products No information available

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

Irritation	May cause irritation of respiratorytract
Sensitization	No informationavailable
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Urea	57-13-6	Not listed	Not listed	Not listed	Not listed	Not listed

MutagenicEffects	No informationavailable
ReproductiveEffects	No informationavailable.
DevelopmentalEffects	No informationavailable.
Teratogenicity	No informationavailable.
STOT -singleexposure	Noneknown
STOT -repeatedexposure	Noneknown
Aspirationhazard	No informationavailable
Symptoms / effects,both acute and delayed	No information available
EndocrineDisruptorInformation	No informationavailable
OtherAdverseEffects	The toxicological properties have not been fullyinvestigated.

12. Ecological information

Ecotoxicity

Urea

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Urea	Not listed	LC50: 16200 - 18300 mg/L, 96h (Poecilia reticulata)	= 23914 mg/LEC50 Photobacterium phosphoreum 5min	EC50: > 10000 mg/L, 24h (Daphnia magna Straus) EC50: = 3910 mg/L, 48h Static (Daphniamagna)

PersistenceandDegradability Persistence is unlikely

Bioaccumulation/Accumulation No information available.

Mobility . Will likely be mobile in the environment due to its watersolubility.

Component	log Pow
Urea	-1.59

13. Disposal considerations

WasteDisposalMethods Chemical wastegenerators mustdeterminewhetheradiscardedchemicalisclassifiedasa hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT Notregulated
TDG Notregulated
IATA Notregulated
IMDG/IMO Notregulated

15. Regulatory information

United States of America Inventory

Component	CAS-No	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags
Urea	57-13-6	X	ACTIVE	-

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - NoticesofExport Notapplicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
Urea	57-13-6	X	-	200-315-5	X	X	X	X	KE-35144

U.S. Federal Regulations

SARA313 Notapplicable

SARA 311/312HazardCategories See section 2 for moreinformation

CWA (CleanWaterAct) Notapplicable

CleanAirAct Notapplicable

OSHA - OccupationalSafetyand Notapplicable

Urea

Health Administration

CERCLA Notapplicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations Not applicable

U.S. Department of Transportation
Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security This product does not contain any DHS chemicals.

Other International Regulations

Mexico-Grade No information available

16. Other information

Prepared By Shri Shanti Laboratories

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