Safety Data Sheet

Urea Nitrogen

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Product Identification: Urea Nitrogen
Ref No. 0580, 0580-250, etc.

Test kit contains Urea Nitrogen Standard, Urea Nitrogen Color Reagent, and Urea Nitrogen Acid Reagent.

Company Identification: Stanbio Laboratory
1261 North Main Street
Boerne, TX 78006

Telephone Number: (830) 249-0772
Website: http://www.ekfusa.com

SECTION 2 – HAZARDS IDENTIFICATION

Routes of Exposure: Only when used as directed.
Classification system: In compliance with OSHA's Hazard Communication Standard (29CFR 1910.1200), a chemical mixture is considered hazardous if it contains 1.0% or more of a hazardous compound or 0.1% or more of a carcinogen. The product contains hazardous material(s) in excess of these amounts; therefore, precautions adequate for the pure form of the material(s) are presented here.
According to **Regulation (EC) No1272/2008**
Danger

H314 Causes severe skin burns and eye damage

National Fire Protection Association (NFPA) ratings (scale 0-4):

Health=0
Fire=0
Reactivity=0

Hazard Overview
Health: Minimal risk if used as directed.
Fire: Not considered a fire hazard**.**
Reactivity: Urea Nitrogen Acid Reagent contains Sulfuric Acid. Minimal risk.
Special Hazards: Sulfuric Acid: With heat (at 340°C), it decomposes into toxic oxides of sulfur.
Carcinogenicity information
OSHA (Occupational Safety and Health Administration): None of the ingredients is listed.
NTP (National Toxicology Program): None of the ingredients is listed.
IARC (International Agency for Research on Cancer): None of the ingredients is listed.

SECTION 3 – PRODUCT COMPOSITION

The test kit is composed of Urea Nitrogen Standard, Urea Nitrogen Color Reagent, and Urea Nitrogen Acid Reagent.

Urea Nitrogen

Urea Nitrogen Standard/0581, 0582, & 0583 (The reagent contains by percentage the following amounts of chemicals)

Chemical Name	CAS No.	Concentration
None determined to be hazardous.		

Urea Nitrogen Color Reagent/0584 (The reagent contains by percentage the following amounts of chemicals)

Chemical Name	CAS No.	Concentration
None determined to be hazardous.		

Urea Nitrogen Acid Reagent/0585 (The reagent contains by percentage the following amounts of chemicals)

Chemical Name	CAS No.	Concentration
Sulfuric Acid	7664-93-9	5.00%

SECTION 4 – FIRST AID MEASURES

After inhalation: Provide fresh air. Restore or support breathing. Keep victim warm and quiet. Get medical attention.
After skin contact: Flush skin with water for 15 minutes. Wash affected area thoroughly with soap and water. Remove contaminated clothing and shoes. Get medical attention if irritation develops or persists.
After eye contact: Flush eyes including under the eyelids with water for 15 minutes. Get medical attention.
After swallowing: Wash out mouth with water. Do not give anything by mouth to an unconscious person. Get medical attention.

SECTION 5 – FIRE FIGHTING MEASURES

Suitable extinguishing agents:

Sulfuric acid: Dry chemical or carbon dioxide.

Protective equipment: Wear a self-contained breathing apparatus and protective clothing.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Safe work practices: Disposal should be made in accordance with existing disposal practices employed for infectious waste.
Measures for environmental protection: Prevent liquid and vapor from entering sewage system, storm drains, surface waters, and soil.
Measures for cleaning/collecting: Wash spill area with appropriate cleaning materials. Dispose of in a manner consistent with federal, state and local regulation.

SECTION 7 – HANDLING AND STORAGE

Information for safe handling: Refer to the package insert or product label for additional information on storage conditions.
Information about protection against explosions and fires: No special measures required.
Requirements to be met by storerooms and receptacles: Refer to the package insert or product label for additional information on storage conditions.
Information about storage in one common storage facility: Store product in original packaging.
Further information about storage conditions: Protect from heat and direct sunlight.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with Occupational Exposure Limits: The product does not contain any hazardous ingredients with occupational exposure limits established by OSHA, ACGIH, or NIOSH.
General protective and hygienic measures: Always maintain good housekeeping. Do not eat, drink or store food and beverages in areas where chemicals are used. Wash hands before breaks and at the end of the work shift.
Breathing equipment: Use adequate protection to prevent inhalation, as well as good ventilation.
Hand protection: Wear necessary gloves when handling.
Eye protection: Wear appropriate safety glasses or other protective eyewear.
Body protection: Wear apron, laboratory coat or appropriate protective clothing when handling.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid
Color: Not applicable
Odor: Not identified
Boiling point/ Boiling range
Sulfuric Acid – 290-338°C/554-640.4°C
Flash point:
Sulfuric Acid - NA
Auto igniting: Not self-igniting
Danger of explosion: not a hazard
Density at 20°C (68°F): not applicable
Solubility in/Miscibility with Water: not applicable
PH-value at 20°C (68°F): not applicable
Water: not applicable

SECTION 10 – STABILITY AND REACTIVITY

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
Dangerous reactions: No dangerous reactions known.
Stability: Stable.
Incompatibility: None.
Hazardous Polymerization: Will not occur.

Urea Nitrogen

Dangerous reactions: No dangerous decomposition products known.

SECTION 11 – TOXICOLOGICAL INFORMATION

LD50/50LC values for hazardous ingredients per OSHA criteria:
Ingredients (100% pure substance/s)

Sulfuric Acid - LD50 (oral rat): 2140 mg/kg

Primary toxicological effects of the final product
Skin irritation:

Sulfuric Acid - Skin contact with concentrated acid may cause severe second and third degree skin burns with necrosis.

Eye irritation:

Sulfuric Acid - Eye contact by sulfuric acid vapors may cause burning or stinging sensation with lacrimation, blurred vision and conjuctival congestion. Splashes of acid in the eyes may produce deep corneal ulceration, kerato-conjunctivitis and palpebral lesions with severe sequelae.

Sensitization: No sensitizing effects known.
Target organs/systems: Not determined.

SECTION 12 – ECOLOGICAL INFORMATION

Toxicity: Further details: no data available
Persistence and degradability: Further details: no data available
Bioaccumulative potential: Partition coefficient: n-octanol/water: no data available
Mobility in soil: no data available
Results of PBT and vPvB assessment: no data available
General information: Do not allow to enter into ground-water, surface water or drains.

SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

SECTION 14 – TRANSPORT INFORMATION

Sulfuric Acid:
DOT/TDG/IATA/ IMDG/IMO
UN-No: UN1830
Proper Shipping Name: SULFURIC ACID
Hazard Group: 8
Packing Group: II

SECTION 15 – REGULATORY INFORMATION

SARA (Superfund Amendments and Reauthorization Act of 1986 – USA):
SARA 311/312 Hazardous Categorization: Sulfuric Acid
Acute Health Hazard: Yes
Chronic Health Hazard: Yes
Fire Hazard: No
Sudden Release of Pressure Hazard: No

Urea Nitrogen

Reactive Hazard: Yes
Section 313 (40CFR372.65): Sulfuric Acid CAS No 7664-93-9 threshold values 1.0%.
California Proposition 65 (USA)
Chemicals known to cause cancer: The product does not contain listed substances.
Chemicals known to cause female reproductive toxicity: None of the ingredients is listed.
Chemicals known to cause male reproductive toxicity: None of the ingredients is listed.
Chemicals known to cause developmental reproductive toxicity: Phenyl Mercuric Acetate.
Markings according to European guidelines: Observe the general safety regulations when handling chemicals. The product does not require any hazard warnings according the respective European Community (EC) Directives.
Inventory status – Listed with the following international inventories: Sulfuric Acid

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
EINECS, ELINCS or NLP:	On or in compliance with the inventory
Japan (ENCS) List:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	On or in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory

SECTION 16 – OTHER INFORMATION

The information contained in this SDS is believed to be accurate and represents the best information currently available. Stanbio Laboratory makes no warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should determine suitability of the information contained in SDS for their particular purpose.
In no way shall Stanbio Laboratory be liable for any claims, losses or damages resulting from using information contained in SDS.