Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision Date: 10/25/2014 Date of issue: 10/25/2014

## **SECTION 1: IDENTIFICATION**

1.1. Product Identifier

**Product Form:** Mixture

**Product Name:** XRT® Polymer Coated Urea— All Analyses

1.2. Intended Use of the Product

Use of the substance/mixture: Fertilizer 1.3. Details of the Supplier of the Safety Data Sheet

KMB Technologies, LLC

P.O. Box 248 Knox, IN 46534 TEL: 574-772-6275

1.4. Emergency Telephone Number

Emergency Number: CHEMTREC 1-800-424-9300

## **SECTION 2: HAZARDS IDENTIFICATION**

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

 Skin Irrit. 2
 H315

 Eye Irrit. 2B
 H320

 STOT SE 3
 H335

2.2. Label Elements GHS-US Labeling

Hazard Pictograms (GHS-US):



Signal Word (GHS-US) : Warning

Hazard Statements (GHS-US) : H315 - Causes skin irritation

H320 - Causes eve irritation

H335 - May cause respiratory irritation

Precautionary Statements (GHS-US) : P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash hands thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P302+P352 - IF ON SKIN: Wash with plenty of water

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for

oreathing

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P312 - Call a poison center/doctor if you feel unwell P321 - Specific treatment (see Section 4 on this label)

P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362 - Take off contaminated clothing and wash before reuse

P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P501 - Dispose of contents/container according to local, regional, national, and

international regulations

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#### 2.3. Other Hazards

Other Hazards: No additional information available

## 2.4. Unknown Acute Toxicity (GHS-US)

No data available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substance

Not applicable

## 3.2. Mixture (Exact percentages of ingredients are being withheld as a trade secret)

Name	Product identifier	%	Classification (GHS-US)
Urea	(CAS No) 57-13-6	90.0 - 100	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Polymer Coating	(CAS No) N/A	0.0 - 5	Not classified
Wax	(CAS No) N/A	0.0 - 5	Not classified

Full text of H-phrases: see section 16

## **SECTION 4: FIRST AID MEASURES**

#### 4.1.Description of First Aid Measures

**First-aid Measures General**: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid Measures After Inhalation**: If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing.

**First-aid Measures After Skin Contact**: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

**First-aid Measures After Eye Contact**: Immediately rinse with water for a prolonged period (at least 15 minutes) while holding the eyelids wide open. Obtain medical attention if irritation develops or persists.

**First-aid Measures After Ingestion**: Rinse mouth, DO NOT induce vomiting: seek medical advice immediately.

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

**Symptoms/Injuries:** Not expected to present a significant hazard under anticipated conditions of normal use.

#### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

## **SECTION 5: FIRE-FIGHTING MEASURES**

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Not considered flammable but will burn at high temperatures. Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: None known.

## 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Decomposes above 132 °C (270 °F). Under conditions of fire this material may produce: Ammonia. Nitrogen oxides. Biuret. Cyanuric acid.

**Explosion Hazard:** May form explosive compounds if mixed with: Calcium hypochlorite. Sodium hypochlorite. Nitrates. Nitric acid. Perchloric acid. Product itself is not explosive but if dust is generated, dust clouds suspended in air can be explosive.

**Reactivity:** This product as shipped in the form of coarse granules should not contain sufficient dust to present an explosion hazard. Prevent dust accumulation (to minimize explosion hazard).

#### 5.3. Advice for Firefighters

Firefighting Instructions: Not flammable.

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**Protection During Firefighting:** Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Other information: Do not allow run-off from fire fighting to enter drains or water courses.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

## 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures**: Handle in accordance with good industrial hygiene and safety practice. This material becomes slippery when wet.

## 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Wear suitable protective clothing, gloves and eye/face protection. **Emergency Procedures:** Collect as any solid. Ventilate area. Evacuate unnecessary personnel. **6.1.2. For Emergency Responders** 

Protective Equipment: Wear suitable protective clothing, gloves and eye/face protection.

**Emergency Procedures:** If possible, stop flow of product. Contain and collect as any solid. Ventilate area. Evacuate unnecessary personnel.

#### 6.2. Environmental Precautions

Avoid release to the environment.

## 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain and collect as any solid. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.

**Methods for Cleaning Up:** Recover the product by vacuuming, shoveling or sweeping. Avoid generation of dust during clean-up of spills. If spilled directly onto the ground, remove sufficient soil to ensure material is fully recovered. Material may be used if uncontaminated.

6.4. Reference to Other Sections: No additional information available

## **SECTION 7: HANDLING AND STORAGE**

## 7.1. Precautions for Safe Handling

Additional Hazards When Processed: This material can become slippery when wet. Precautions for Safe Handling: Handle in accordance with good industrial hygiene and safety procedures. Wear recommended personal protective equipment. Avoid creating or spreading dust. Hygiene Measures: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

#### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Storage Conditions:** Store tightly closed in a dry, cool and well-ventilated place. Protect from moisture. **Prohibitions on mixed storage:** Store away from: Ammonium nitrate. Refer to Section 10 on Incompatible Materials.

### 7.3. Specific End Use(s)

Fertilizer.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

8.1. Control Parameters: No additional information available

#### 8.2. Exposure Controls

**Appropriate Engineering Controls**: Ensure all national/local regulations are observed. **Personal Protective Equipment**: Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection. For particulates and dust: Safety glasses.









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**Hand Protection:** Protective Gloves. **Eye Protection:** Safety glasses.

**Skin and Body Protection**: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, NIOSH approved

respiratory protection should be worn.

**Environmental Exposure Controls**: Ensure adequate ventilation, especially in confined areas.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

## 9.1. Information on Basic Physical and Chemical Properties

Physical State: Solid.

**Appearance:** Yellow Granules.

Color: Yellow

Odor: No data available

**Odor Threshold:** N/A N/A pH: pH solution: N/A Relative Evaporation Rate (butylacetate=1): N/A **Melting Point:** N/A Freezing Point: N/A **Boiling Point:** N/A Flash Point: N/A

Auto-ignition Temperature:No data availableDecomposition Temperature:No data availableFlammability (solid, gas):No data available

Vapor Pressure: N/A

Relative Vapor Density at 20° C:

Relative Density:

No data available

No data available

**Density:** 45 lb/ft<sup>3</sup>

Solubility: Water: Slightly soluble Partition coefficient: n-octanol/water: No data available

Viscosity: N/A

9.2. Other Information No additional information available

## **SECTION 10: STABILITY AND REACTIVITY**

10.1. Reactivity: Not reactive.

- **10.2. Chemical Stability:** Stable at standard temperature and pressure.
- 10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
- **10.4. Conditions to Avoid:** Protect from moisture. Keep away from heat.
- **10.5. Incompatible Materials:** May form explosive mixture if in contact with strong acid such as nitric or perchloric acids. Avoid contact with: Strong oxidizers. Strong acids, bases. Nitrates. Hypochlorites. Perchlorates. Chlorides. Corrosive to copper and its alloys.
- **10.6. Hazardous Decomposition Products:** Under conditions of fire this material may produce: Nitrogen oxides. Ammonia. Biuret. Carbon oxides (CO, CO<sub>2</sub>). Formaldehyde.

## SECTION 11: TOXICOLOGICAL INFORMATION

## 11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Urea (57-13-6)	
LD <sub>50</sub> Oral Rat	8471 mg/kg
LD <sub>50</sub> dermal rat	>3200 mg/kg
LD <sub>50</sub> dermal rabbit	>21000 mg/kg
ATE (Oral)	8,471.00 mg/kg body weight

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Skin Corrosion/Irritation: Causes skin irritation.
Serious Eye Damage/Irritation: Causes eye irritation.
Respiratory or Skin Sensitization: Not classified.

Germ Cell Mutagenicity: Not classified. Based on available data, the classification criteria are not met.

Carcinogenicity: Not classified Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Based on available data, the classification

criteria are not met.

**Aspiration Hazard:** Not classified. Based on available data, the classification criteria are not met. **Potential Adverse Human Effects and Symptoms:** Based on available data, the classification criteria

are not met.

## SECTION 12: ECOLOGICAL INFORMATION

#### 12.1. Toxicity

Urea (57-13-6)	
LC <sub>50</sub> Fish 1	>6810 mg/l (96 h; Leuciscus idus)
EC <sub>50</sub> Daphnia 1	>10000 mg/l (48 h; <i>Daphnia magna</i> )
LC <sub>50</sub> Fish 2	17500 mg/l (96 h; Poecillia reticulata)
EC <sub>50</sub> Daphnia 2	>10000 mg/l (24 h; <i>Daphnia magna</i> )
TLM Fish 1	17500 mg/l (96 h; Poecillia reticulata)
Threshold limit other aquatic organisms 1	120000mg/l (16 h; Bacteria; Toxicity Test
Threshold limit other aquatic organisms 2	>10000 mg/l (Pseudomonas putida)
Threshold limit algae 2	>10000 mg/l (168 h; Scenedesmus quadricauda)

## 12.2. Persistence and Degradability

VDT <sup>R</sup> D. I. O. ( III All A. I		
XRT® Polymer Coated Urea – All Analyses		
Persistence and Degradability	Not established	
Urea (57-13-6)		
Persistence and Degradability	Inherently biodegradable. Hydrolyses in water.	
ThOD	0.27 g O <sub>2</sub> /g substance	
Wax		
Persistence and Degradability	Not established	

#### 12.3. Bioaccumulative Potential

XRT® Polymer Coated Urea – All Analyses		
Bioaccumulative Potential	Not established	
Urea (57-13-6)		
BCF fish 1	1 (72 h; Brachydanio rerio; Fresh water)	
BCF Other Aquatic Organisms 1	11700 (Chlorella sp.)	
Log Pow	-1.59 (at 25 °C)	
Bioaccumulative Potential	Bioaccumulation: Not applicable. Not established	
Wax		
Bioaccumulative Potential	Not established	

- **12.4. Mobility in Soil:** No additional information available.
- 12.5. Other Adverse Effects: No additional information available.

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## SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional,

national, and international regulations.

Additional Information: Avoid release into the environment.

## **SECTION 14: TRANSPORT INFORMATION**

14.1. In Accordance with DOT: Not regulated for transport

14.2. In Accordance with IMDG: Not regulated for transport

14.3. In Accordance with IATA: Not regulated for transport

## **SECTION 15: REGULATORY INFORMATION**

## 15.1. US Federal Regulations

## XRT® Polymer Coated Urea – All Analyses

Not listed on the United States TSCA (Toxic Substances Control Act) Inventory

#### Urea (57-13-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable *de minimis* concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

#### 15.2. US State Regulations

**California Proposition 65:** This product does not contain any substance known to the State of California to cause cancer and/or reproductive harm.

#### 15.3. International Regulations

No additional information available

## **SECTION 16: OTHER INFORMATION**

**Other Information:** This document has been prepared in accordance with the SDSrequirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

#### **GHS Full Text Phrases:**

Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H315	Causes skin irritation
H320	Causes eye irritation
H335	May cause respiratory irritation

DISCLAIMER: The information contained in this SDS is based on available data. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof; and you should make your own investigation to determine safety for the use you intend. KMB Technologies, LLC makes no warranty of merchantability of fitness for a particular use, nor is there any other express or implied warranty except as may be specifically provided otherwise on the product. KMB Technologies LLC assumes no responsibility or liability for any incidental or consequential damages whether related to personal injury or property damage, to buyers, users or third parties, caused by the product and KMB's responsibility is limited to replacement of, or repayment of, the purchase price for the product with respect to which any damages are claimed. All buyers or users assume all risk with the use of the product.