SAFETY DATA SHEET

KRATON

1. Identification

Product identifier UNI-REZ™ 2215

Other means of identification

SDS number 8488

Product Code 200000000004

Recommended use Industrial uses: Uses of substances as such or in preparations at industrial sites. Formulation

[mixing] of preparations and/or re-packaging (excluding alloys).

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company Arizona Chemical Company LLC

Address Building 100

4600 Touchton Road East, Suite 1200

City/State Jacksonville, FL

Zip 32246 **Country** USA

 Phone Number
 904-928-8700

 Alternate Phone Number
 800-526-5294

 Fax Number
 904-928-8780

Emergency-US CHEMTREC 800-424-9300

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Combustible dust

Label elements

Hazard symbol None.

Signal word Warning

Hazard statement May form combustible dust concentrations in air.

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly

closed. Ground/bond container and receiving equipment. Prevent dust accumulation to minimize

explosion hazard. Observe good industrial hygiene practices.

Response Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to

extinguish.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Substances

Chemical name Common name and synonyms **CAS** number % Proprietary Polyamide Resin 99-100

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Wash off with soap and water. Get medical attention if irritation develops and persists. Skin contact Eve contact Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

Rinse mouth. Get medical attention if symptoms occur. Ingestion Dusts may irritate the respiratory tract, skin and eyes. Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special treatment needed

Treat symptomatically.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

5. Fire-fighting measures

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Apply extinguishing media Suitable extinguishing media

carefully to avoid creating airborne dust.

Unsuitable extinguishing

media

Specific hazards arising from the chemical

High concentration of airborne dust may form explosive mixture with air. Static charges generated by emptying package in or near flammable vapor may cause flash fire. During fire, gases hazardous to health may be formed. Upon decomposition, this product emits carbon monoxide,

carbon dioxide and/or low molecular weight hydrocarbons.

Do not use water jet as an extinguisher, as this will spread the fire.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

In case of fire and/or explosion do not breathe fumes. Wear suitable protective equipment. Move

Fire fighting equipment/instructions

containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards May form combustible dust concentrations in air.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Use only non-sparking tools. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

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7. Handling and storage

Precautions for safe handling

Minimize dust generation and accumulation. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Explosion-proof general and local exhaust ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. Follow all SDS/label precautions even after container is emptied because they may retain product residues.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Store at ambient temperature and atmospheric pressure. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-3 (29 CFR 1910.1000)

Additional components	Туре	Value	Form
Dust	TWA	5 mg/m3 15 mg/m3	Respirable fraction. Total dust.

Biological limit values

Appropriate engineering

controls

No biological exposure limits noted for the ingredient(s).

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Other Wear suitable protective clothing.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure

Wear appropriate thermal protective clothing, when necessary.

limits (where applicable) or to an acceptable level (in countries where exposure limits have not

been established), an approved respirator must be worn.

Thermal hazards



General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Eye wash fountain and emergency showers are recommended.

9. Physical and chemical properties

Appearance Solid.
Physical state Solid.
Form Granular.
Color Amber.
Odor Mild.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling Not available.

range

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> 200.8 °F (> 93.8 °C) Cleveland Open Cup Flash point

0 n-BuAc=1 estimated **Evaporation rate**

Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits Flammability limit - lower

(%)

Not available.

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available.

< 0.001 mm Hg at 20°C Vapor pressure

Vapor density Not available.

0.97 at 25°C/25°C (water=1) Relative density

Solubility(ies)

< 0.1 % at 25°C Solubility (water) **Partition coefficient** Not available.

(n-octanol/water)

Auto-ignition temperature Not available. Not available. **Decomposition temperature**

600 cP Brookfield at 160°C **Viscosity**

Other information

Polyamide Resin **Chemical family** 970.00 kg/m3 Density

Percent volatile 0 % by weight estimated 244.4 °F (118 °C) Ring & Ball Softening point

Specific gravity 0.94 estimated

100 % Weighted solids

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Strong oxidizing agents. Keep away from heat, sparks and open flame. Contact with incompatible

materials. Minimize dust generation and accumulation.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

Upon decomposition this product emits acrid dense smoke with carbon dioxide, carbon monoxide,

water and other products of combustion.

11. Toxicological information

Information on likely routes of exposure

Inhalation Dust may irritate respiratory system.

Skin contact No adverse effects due to skin contact are expected. Direct contact with eyes may cause temporary irritation. Eye contact

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Dusts may irritate the respiratory tract, skin and eyes.

Information on toxicological effects

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

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Components	Species	rest Results
Polyamide Resin		
<u>Acute</u>		
Oral		
LD50	Rat	> 5000 mg/kg, 14 days At this dose no death occurred.;Data is for similar product.;

^{*} Estimates for product may be based on additional component data not shown.

Species

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye Direct contact with eyes may cause temporary irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

Sensitization

Polyamide Resin Buehler Test, Not a skin sensitizer.; Data is for similar

product.;

Result: Negative Species: Guinea pig Organ: Skin Toot Doculto

OECD 401

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not available.

Specific target organ toxicity -

repeated exposure

Not available.

Aspiration hazard Not available.

12. Ecological information

EcotoxicityThe product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
Polyamide Resin			
Acute			
	EC50	Bacteria (Pseudomonas putida)	> 1000 mg/l, 16 hr >> Water solubility; Data is for similar product.;
Aquatic			
Crustacea	NOEC	Water flea (Daphnia magna)	> 1000 mg/l, 48 hr Data is for similar product.; OECD 202;
Acute			
Crustacea	EL50	Water flea (Daphnia magna)	> 1000 mg/l, 48 hr >> Water solubility; Data is for similar product.; OECD 202;

^{*} Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

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Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and

Not applicable.

the IBC Code

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

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

Not regulated.

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

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

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NFPA ratings

Health: 1 Flammability: 1 Instability: 0

NFPA ratings



16. Other information, including date of preparation or last revision

 Issue date
 12-29-2014

 Revision date
 12-01-2016

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Further information Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the

Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

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