

SAFETY DATA SHEET

SECTION 1

MATERIAL IDENTIFICATION

PRODUCT NAME / DESCRIPTION: RXN-830

DISTRIBUTED / MANUFACTURED BY:

Reaction Engineering

10585 Bison Rd

Dodge City, KS 67801

Date: 12/10/2015

Phone: (620) 225-2180

Emergency Phone: (800) 255-3924

FUNCTION Industrial Water Treatment

SECTION 2

HAZARD IDENTIFICATION

CLASSIFICATION:

| | |
|------------------------------------|------------|
| Acute Toxicity: | Category 5 |
| Skin Corrosion/Irritation: | Category 2 |
| Serious Eye Damage/Eye Irritation: | Category 2 |
| TOST:Chronic | Category 2 |

SIGNAL WORD:

WARNING!

HAZARD STATEMENTS:

May be harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May cause damage to organs through prolonged or repeated exposure.



PRECAUTIONARY STATEMENTS

Obtain Special instructions before use.

Do not handle until all safety precautions have been read and understood.

Use personal protective equipment as required.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well ventilated area.

Wash all exposed skin thoroughly after handling.

Avoid release to the environment.

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

Keep out of reach of children.

Read label before use.

Keep container tightly closed.

Keep only in original container.

Do not get in eyes, on skin, or on clothing.

Do not eat, drink, or smoke when using this product.

TOXICITY:

See Section 11

SECTION 3

HEALTH HAZARDS

CHEMICAL NAME

%W/W

CAS NUMBER

(Proprietary

Formula)

SECTION 4

FIRST AID

Potential acute health effects:

Eyes: May cause severe irritation, burns, and/or damage

Skin: May cause severe irritation, burns, and/or damage

Inhalation: Inhalation may cause severe irritation

Ingestion: Ingestion may cause irritation, corrosion/ulceration, nausea, and vomiting.

Medical conditions aggravated by exposure:

None known.

Eye Contact: In case of contact, immediately flush eyes with cool running water. Lift and separate eyelids while flushing with plenty of water for at least 15 minutes. Get medical attention.

Skin Contact: Wash with soap and water. Get medical attention if irritation occurs. Wash clothing before reuse. Destroy contaminated shoes.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms develop.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Give plenty of water.

SECTION 5

FIRE FIGHTING MEASURES

Fire Hazard Classification (OSHA/NFPA): 0

Extinguishing Media: As required for fire being fought.

Special Fire Fighting Procedures: Use self-contained breathing apparatus.

Hazardous Combustion Products: None known.

SECTION 6

ACCIDENTAL RELEASE MEASURES

Personal Precautions, PPE, and Emergency Procedures: Wear protective clothing as described in Section 8 of this safety data sheet.

Containment Procedures: Stop the flow of material, if this is without risk. Wear appropriate protective equipment and clothing during clean-up. Do not allow the spilled product to enter public drainage system or open water courses.

Clean-Up Procedures: Sweep up or gather material and place in appropriate container for disposal. Wash spill area thoroughly. Wear appropriate protective equipment during cleanup. Dispose of collected material according to regulations.

SECTION 7

HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin, and clothing. Do not take internally. For industrial use only. Wash after handling. Don't breathe dust, vapor, or gas. Keep this and all chemicals out of reach of children.

Storage: Keep away from heat, sparks, and open flames. Prevent spills. Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Empty product containers may contain product residue, do not reuse.

SECTION 8

PERSONAL PROTECTION / EXPOSURE CONTROLS

Ventilation System: Always keep exposure below permissible exposure limits. In general dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

Airborne Exposure Limits: None Established.

Personal Protection: As prescribed in the OSHA Standard for Personal Protective Equipment (29 CFR 1920.132), employers must perform a Hazard Assessment for all workplaces to determine the need for, and selection of, proper protective equipment for each task performed.

Eyes: Wear face shield, safety glasses, or chemical goggles.

Hands & Skin: For prolonged or repeated handling, use impervious gloves. Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron and boots are recommended.

Respiratory: If ventilation is not sufficient appropriate NIOSH/MSHA respiratory protection must be provided.

Work Practices: Eye wash fountain and emergency showers are recommended.

SECTION 9

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---------------|
| Physical Form: | Liquid |
| Color: | Clear |
| Odor: | None |
| Odor Threshold: | NE |
| pH: | NE |
| Boiling Point: | NE |
| Melting Point: | NE |
| Flash Point: | NE |
| Evaporation Rate (Butylacetate=1): | NE |
| Flammability: | Non-Flammable |
| UEL: | NE |
| LEL: | NE |
| Vapor Pressure: | NE |
| Vapor Density: | NE |

| | |
|------------------------------------|-------------|
| Specific Gravity (Water=1): | 1.12+/-0.05 |
| Solubility Water: | Soluble |
| Partition Coefficient: | NE |
| Auto-ignition Temperature: | NE |
| Decomposition Temperature: | NE |
| Viscosity (CPS): | NE |

SECTION 10

STABILITY AND REACTIVITY

| | |
|-----------------------------|---|
| Stability: | This product is stable under normal temperatures and pressures. |
| Incompatibility: | Unknown |
| Decomposition | Unknown |
| Products: | |
| Conditions to Avoid: | None Known |

SECTION 11

TOXICOLOGICAL PROPERTIES

| Raw Material | Test | Result | Route | Species |
|--------------|------|--------|-------|---------|
| N/A | | | | |

See Section 4 for symptoms.

CARCINOGENICITY
No known carcinogens.

MUTAGENICITY:
No known mutagens.

REPRODUCTIVE TOXINS:
No known reproductive toxins.

SECTION 12

ECOLOGICAL INFORMATION

| Raw Material | Test | Result | Time | Species |
|--------------|------|--------|------|---------|
| N/A | | | | |

PERSISTENCE & DEGRADABILITY:
NE

BIOACCUMULATION:
NE

MOBILITY:
NE

SECTION 13

DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use, or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose container and unused contents in accordance with federal, state, and local requirements.

SECTION 14

TRANSPORT INFORMATION

Not a regulated substance.

SECTION 15

REGULATORY INFORMATION

US FEDERAL REGULATIONS

SARA (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

- SARA 302 EXTREMELY HAZARDOUS SUBSTANCES LIST: N/A
- SARA 312 HAZARD CATEGORY: N/A
- SARA 313 TOXIC CHEMICALS LIST: N/A

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT):
N/A

RCRA (RESOURCE CONSERVATION AND RECOVERY ACT) LISTED HAZARDOUS WASTES:
N/A

CWA (CLEAN WATER ACT) LISTED SUBSTANCES:
N/A

FDA (FOOD AND DRUG ADMINISTRATION):
N/A

TOXIC SUBSTANCES CONTROL ACT (TSCA):
ALL INGREDIENTS ARE LISTED.

NFPA HAZARD INFORMATION SIGN

| | | | |
|-----|------------------------------|-----|------------------------------------|
| [1] | HEALTH HAZARD (BLUE DIAMOND) | [0] | REACTIVITY HAZARD (YELLOW DIAMOND) |
| | 4-DEADLY | | 4-MAY DETONATE |
| | 3-EXTREME DANGER | | 3-SHOCK AND HEAT MAY DETONATE |
| | 2-HAZARDOUS | | 2-VIOLENT CHEMICAL CHANGE |
| | 1-SLIGHTLY HAZARDOUS | | 1-UNSTABLE IF HEATED |
| | 0-NORMAL MATERIAL | | 0-STABLE |
| [0] | FIRE HAZARD (RED DIAMOND) | [] | SPECIFIC HAZARD (WHITE DIAMOND) |
| | FLASH POINTS: | | OX OXIDIZER |
| | 4-BELOW 73 F | | ACID ACID |

3-BELOW 100 F
2-BELOW 200 F
1-ABOVE 200 F
0-WILL NOT BURN

| | |
|-----|--------------|
| ALK | ALKALI |
| COR | CORROSIVE |
| W | USE NO WATER |

SECTION 16

OTHER INFORMATION

THIS INFORMATION IS OFFERED IN GOOD FAITH AS TYPICAL VALUES AND NOT AS A PRODUCT SPECIFICATION. NO WARRANTY, EXPRESSED OR IMPLIED, IS HEREBY MADE. THE RECOMMENDED INDUSTRIAL HYGIENE AND SAFE HANDLING PROCEDURES ARE BELIEVED TO BE GENERALLY APPLICABLE. HOWEVER, EACH USER SHOULD REVIEW THESE RECOMMENDATIONS IN THE SPECIFIC CONTEXT OF THE INTENDED USE AND DETERMINE WHETHER THEY ARE APPROPRIATE.