



MODERNWATER

## Material Safety Data Sheet

### Ensys® RDX

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#### MATERIAL IDENTIFICATION

Manufacturer/Distributor: Modern Water Inc.  
15 Read's Way, Suite 100  
New Castle, DE 19720

Phone Number: 1-(302)669-6900

Trade Names and Synonyms: Ensys® RDX (7085000)

NFPA Ratings

Health:	2
Flammability:	4
Reactivity:	1

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#### OSHA HAZARD DETERMINATION

Hazardous Ingredients	CAS Number	Weight Percent
Acetone	67-64-1	≤ 100
Acetic Acid	64-19-1	≤ 77
Zinc Metal Powder	7440-66-6	≤ 100
NITRIVER® 3 Nitrite Reagent (powder)		
Chromatropic Acid, Disodium salt	129-96-4	≤ 5.0
Sodium Sufanilate	515-74-2	≤ 15.0
Potassium Pyrosulfate	7790-62-7	≤ 10.0
Potassium Phosphate, Monobasic	7778-77-0	≤ 85.0
1,2-Cyclohexanediaminetetraacetic Acid Trisodium Salt	36679-96-6	≤ 5.0

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## PHYSICAL DATA

Plastic kit containing small amounts of various liquids and powders.

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## HAZARDOUS REACTIVITY

### Instability

Stable – Reactivity not expected with the product.

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## FIRE AND EXPLOSION DATA

### Fire and Explosion Hazards

There is a fire and explosion hazard with some of the materials in this kit. Acetone has a flash point of 1°F and an autoignition temperature of 869°F. Zinc Metal Powder has an autoignition temperature of 860°F. Zinc **reacts violently and/or explosively with water, steam or moisture, and may ignite or explode on contact with moist air.** NitriVer® powder may decompose to form toxic gases, including phosphorus oxides, carbon monoxide, and carbon dioxide during a fire.

### Extinguishing Media

Use carbon dioxide, dry chemical powder or appropriate foam. Water may be effective for cooling, but not for extinguishing. **Do NOT use water to extinguish zinc-related fires.**

### Special Fire Fighting Instructions

Firefighters must wear appropriate protective clothing and self-containing breathing apparatus.

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## HEALTH HAZARD INFORMATION

**Primary Route(s) of Exposure/Entry:** Skin, Eyes and Mouth. Wash thoroughly after handling. If ingested or inhaled seek prompt medical attention.

### Signs and Symptoms of Exposure/Medical Conditions Aggravated by Exposure:

Acetone, acetic acid and zinc may be harmful by ingestion, inhalation and / or skin absorption. Material may cause irritation to skin, eyes, mucous membranes and upper respiratory tract. Continual skin exposure to acetone may cause dermatitis. Ingestion of zinc may cause gastrointestinal irritation with nausea, vomiting and diarrhea. Inhalation of fumes associated with zinc may result in metal fume fever, characterized by flu-like symptoms with metallic taste, and repeated inhalation may cause chronic bronchitis.

**Carcinogenicity:** None of the components in this material is listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.

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**Applicable Exposure Limits**

## Acetone

TLV (ACGIH) 2380 mg / m<sup>3</sup> (1000 ppm)  
1780 mg / m<sup>3</sup> (750 ppm)

PEL (OSHA) 8H TWA 2400 mg / m<sup>3</sup> (1000 ppm)

## Acetic acid

TLV (ACGIH) 37 mg / m<sup>3</sup> (15 ppm)  
25 mg / m<sup>3</sup> (10 ppm)

PEL (OSHA) 25 mg / m<sup>3</sup> (10 ppm)

## Chromatropic Acid, Disodium salt

LD50: Oral rat LD50 > 5000 mg/kg

TLV (ACGIH) Not established

PEL (OSHA) Not established

## Sodium Sufanilate

TLV (ACGIH) Not established

PEL (OSHA) Not established

## Potassium Pyrosulfate

LD50: Oral rat LD50 = 2340 mg/kg

TLV (ACGIH) Not established

PEL (OSHA) Not established

## Potassium Phosphate, Monobasic

LD50: Oral rat LD50 = 7100 mg/kg

TLV (ACGIH) Not established

PEL (OSHA) Not established

## 1,2-Cyclohexanediaminetetraacetic Acid Trisodium Salt

TLV (ACGIH) Not established

PEL (OSHA) Not established

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**FIRST AID****Inhalation**

If inhaled, remove victim to fresh air. If not breathing give artificial respiration. Consult a physician if necessary.

- Skin Contact** The compound is not likely to be hazardous by skin contact, but may cause irritation. If irritation occurs, flush skin with large amounts of soapy water.
- Eye Contact** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.
- Ingestion** The compound is toxic by ingestion. If swallowed, wash mouth out with water provided that person is conscious. Call a physician.

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## PROTECTION INFORMATION

**General Control Measures and Precautions:** Ventilation – Adequately ventilated work space is required.

**Personal Protective Equipment:** Respiratory Protection: None required.

Protective Gloves: Are highly recommended to prevent skin exposure.

Eye Protection: Safety glasses are required.

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## SPILL, LEAK AND DISPOSAL INFORMATION

**Spill, Leak, or Release** Review FIRE AND EXPLOSION HAZARDS and SAFETY PRECAUTIONS before proceeding with clean up.

Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean up.

Clean up spill with an activated carbon absorbent, take up and place in closed container. Ventilate and wash spill site after material pick up is complete.

**Waste Disposal** Dispose of as solid waste in accordance with any applicable federal, state, and local requirements.

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## SHIPPING INFORMATION

**DOT** Proper Shipping Name Not DOT regulated.

**IATA/IMO** Proper Shipping Name Not restricted.

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## TITLE III HAZARD CLASSIFICATION

Acute	No
Chronic	No
Fire	No
Reactivity	No
Pressure	No

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## REGULATORY INFORMATION

OSHA HAZARD DETERMINATION: This material is not known to be hazardous as defined by OSHA's Hazard Communication Standard, 29 CFR 1910.1200

### EPA DETERMINATIONS:

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, & LIABILITY ACT (CERCLA/SUPERFUND), 40 CFR 302 - This material is not known to contain hazardous substances in sufficient quantity to make it subject to CERCLA regulations.

### TOXIC SUBSTANCES CONTROL ACT (TSCA), 40 CFR 710

The material is a mixture as defined by TSCA. The chemical ingredients in this material are in the Section 8(b) Chemical Substance Inventory and/or are otherwise in compliance with TSCA. In the case of ingredients obtained from other manufacturers, Modern Water Inc. relies on the assurance of responsible third parties in providing this statement.

### RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), 40 CFR 261, SUBPARTS C AND D

The material, when discarded or disposed of, is not specifically listed as a hazardous waste in Federal regulations; however, it could be considered hazardous if it meets criteria for being toxic, corrosive, ignitable or reactive according to U.S. EPA definitions (40 CFR 261). This material could also become a hazardous waste if it is mixed with or comes in contact with a listed hazardous waste. If it is a hazardous waste, regulations 40 CFR 262-266 and 268 may apply.

HAZARDOUS MATERIALS TRANSPORTATION REGULATIONS, 49 CFR 171-178 - This material is not known to contain hazardous substances in sufficient quantity to make it subject to the Regulations.

### FOREIGN REGULATIONS: CANADIAN HAZARDOUS PRODUCTS ACT (WHMIS)

The material is not a WHMIS Controlled Product.

**STATE REGULATIONS:****CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986**

(“PROPOSITION 65”) The material is not known to contain any ingredients (s) subject to the Act.

**PENNSYLVANIA WORKER AND COMMUNITY RIGHT TO KNOW ACT**

This material is not known to contain any ingredient(s) subject to the Act. Non-hazardous ingredient(s) information is withheld as trade secret in accordance with Section 11 of the Pennsylvania Worker and Community Right to Know Act.

The above data are based on tests, experience, and other information which Modern Water Inc. believes reliable and are supplied for informational purposes only. However, some ingredients may have been purchased or obtained from third-party manufacturers. In these instances, Modern Water, Inc., in good faith, relies on information provided by those third parties. Since conditions of use are outside our control, MODERN WATER INC. DISCLAIMS ANY LIABILITY FOR DAMAGE OR INJURY WHICH RESULTS FROM USE OF THE ABOVE DATA. NOTHING CONTAINED HEREIN SHALL CONSTITUTE A

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Responsibility for MSDS: Modern Water Inc.  
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\* End of MSDS \*

