

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: September 30, 2019

1 Identification

- **Product identifier**
- **Trade name:** RD CLONE (10-8-16)
- **Other means of identification:** No other identifiers
- **Recommended use and restriction on use**
- **Recommended use:** Fertilizer
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Rare Dankness Nutrients
PO Box 462055
Aurora, Colorado 80046-2055
United States
+1-303-373-7373 Mike Wolf
info@raredanknessnutrients.com
- **Emergency telephone number:** (303) 373-7373

2 Hazard(s) identification

- **Classification of the substance or mixture**
Ox. Sol. 3 H272 May intensify fire; oxidizer.
Eye Irrit. 2A H319 Causes serious eye irritation.
- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS03 GHS07

- **Signal word:** Warning
- **Hazard statements:**
H272 May intensify fire; oxidizer.
H319 Causes serious eye irritation.
- **Precautionary statements:**
P210 Keep away from heat.
P220 Keep/Store away from clothing/combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P370+P378 In case of fire: Use for extinction: Water.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards** There are no other hazards not otherwise classified that have been identified.

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3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Components:**

6484-52-2	Ammonium nitrate	 Ox. Sol. 2, H272	20-40%
7757-79-1	Potassium nitrate	 Ox. Sol. 2, H272  Eye Irrit. 2A, H319	20-40%
1303-96-4	Disodium tetraborate, decahydrate	 Repr. 1B, H360  Eye Irrit. 2A, H319	<1%

· **Additional information:**

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

Total boron content is less than 0.1%.

For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

· **Description of first aid measures**

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Wash with soap and water.

If skin irritation is experienced, consult a doctor.

· **After eye contact:**

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

· **Most important symptoms and effects, both acute and delayed:**

Gastric or intestinal disorders when ingested.

Methaemoglobinaemia

Causes serious eye irritation.

· **Indication of any immediate medical attention and special treatment needed:**

Contains nitrates. Consult literature for specific antidotes.

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

5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:** Water

· **For safety reasons unsuitable extinguishing agents:** No relevant information available.

· **Special hazards arising from the substance or mixture**

During heating or in case of fire poisonous gases are produced.

May intensify fire; oxidizer.

· **Advice for firefighters**

· **Protective equipment:**

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Wear self-contained respiratory protective device.

Wear fully protective suit.

· **Additional information:** Cool endangered receptacles with water spray.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid formation of dust.

Avoid breathing dust.

Use personal protective equipment as required.

Ensure adequate ventilation.

Take any precaution to avoid mixing with combustibles.

Protect from heat

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

Environmental precautions

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Methods and material for containment and cleaning up

Sweep up and place into an appropriate container.

Rinse remainder away with copious quantities of water.

Send for recovery or disposal in suitable receptacles.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling**Precautions for safe handling:**

Prevent formation of dust.

Avoid breathing dust.

Any deposit of dust which cannot be avoided must be regularly removed.

Use only in well ventilated areas.

Information about protection against explosions and fires:

Protect from heat.

Take any precaution to avoid mixing with combustibles.

Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities**Requirements to be met by storerooms and receptacles:** Keep away from heat.**Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from flammable substances.

Do not store together with acids.

Further information about storage conditions:

Keep containers tightly sealed.

Protect from humidity and water.

This product is hygroscopic.

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 · **Specific end use(s)** No relevant information available.

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8 Exposure controls/personal protection

· Control parameters

· Components with limit values that require monitoring at the workplace:

1303-96-4 Disodium tetraborate, decahydrate

REL (USA)	Long-term value: 5 mg/m ³
TLV (USA)	Short-term value: 6* mg/m ³ Long-term value: 2* mg/m ³ *as inhalable fraction
EL (Canada)	Short-term value: 6 mg/m ³ Long-term value: 2 mg/m ³
EV (Canada)	Short-term value: 6 mg/m ³ Long-term value: 2 mg/m ³ inorganic, inhalable
LMPE (Mexico)	Short-term value: 6* mg/m ³ Long-term value: 2* mg/m ³ A4, *fracción inhalable

· Exposure controls

· General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.
 Keep away from foodstuffs, beverages and feed.
 Wash hands before breaks and at the end of work.
 Avoid contact with the eyes and skin.

· Engineering controls: Provide adequate ventilation.

· Breathing equipment:

Not required under normal conditions of use.
 Use suitable respiratory protective device in case of insufficient ventilation.

· Protection of hands: Gloves are advised for repeated or prolonged contact.

· Material of gloves

Nitrile rubber, NBR
 Butyl rubber, BR
 Neoprene gloves
 Natural rubber, NR

· Eye protection:



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

· Body protection:

Not required under normal conditions of use.
 Protection may be required for spills.

· Limitation and supervision of exposure into the environment

No relevant information available.

· Risk management measures No relevant information available.

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· Appearance:

Form: Solid
Color: According to product specification

· Odor: Characteristic

· Odor threshold: Not determined.

· pH-value: Not applicable.

· Melting point/Melting range: Not determined.

· Boiling point/Boiling range: Not determined.

· Flash point: The product is not flammable.

· Flammability (solid, gaseous): Contact with combustible material may cause fire.

· Auto-ignition temperature: Not determined.

· Decomposition temperature: Not determined.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits

Lower: Not determined.

Upper: Not determined.

· Oxidizing properties: Oxidizer

· Vapor pressure: Not applicable.

· Density:

Relative density: Not determined.

Vapor density: Not applicable.

Evaporation rate: Not applicable.

· Solubility in / Miscibility with

Water: Soluble.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity

Dynamic: Not applicable.

Kinematic: Not applicable.

· Other information: No relevant information available.

10 Stability and reactivity

· **Reactivity:** No relevant information available.

· **Chemical stability:** Stable under normal temperatures and pressures.

· **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.

· Possibility of hazardous reactions

Acts as an oxidizing agent on organic materials such as wood, paper and fats.

Toxic fumes may be released if heated above the decomposition point.

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Contact with acids releases toxic gases.

· **Conditions to avoid**

Moisture.
Excessive heat and contact with acids.

· **Incompatible materials**

Flammable materials.
Acids.

· **Hazardous decomposition products**

Under fire conditions only:
Carbon monoxide and carbon dioxide
Nitrogen oxides
Phosphorus oxides (e.g. P2O5)
Toxic metal oxide smoke

11 Toxicological information

· **Information on toxicological effects**

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

· **LD/LC50 values that are relevant for classification:**

1303-96-4 Disodium tetraborate, decahydrate

Oral	LD50	2660 mg/kg (rat)
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· **Primary irritant effect:**

· **On the skin:** Based on available data, the classification criteria are not met.

· **On the eye:** Causes eye irritation.

· **Sensitization:** Based on available data, the classification criteria are not met.

· **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

· **NTP (National Toxicology Program):**

None of the ingredients are listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

· **Probable route(s) of exposure:**

Ingestion.
Inhalation.
Eye contact.
Skin contact.

· **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

· **Carcinogenicity:** Based on available data, the classification criteria are not met.

· **Reproductive toxicity:** Based on available data, the classification criteria are not met.

· **STOT-single exposure:** Based on available data, the classification criteria are not met.

· **STOT-repeated exposure:** Based on available data, the classification criteria are not met.

· **Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information

· **Toxicity**

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- **Aquatic toxicity** No relevant information available.
- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** No relevant information available.
- **Mobility in soil:** No relevant information available.
- **Other adverse effects** No relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.
- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|---------------------------------------|---|
| · UN-Number | |
| · DOT, ADR/RID/ADN, IMDG, IATA | UN1477 |
| · UN proper shipping name | |
| · DOT, IATA | Nitrates, inorganic, n.o.s. (Potassium nitrate, Ammonium nitrate) |
| · ADR/RID/ADN, IMDG | NITRATES, INORGANIC, N.O.S. (POTASSIUM NITRATE, AMMONIUM NITRATE) |
| · Transport hazard class(es) | |
| · DOT | |
| |  |
| · Class | 5.1 |
| · Label | 5.1 |
| ----- | |
| · ADR/RID/ADN | |
| |  |
| · Class | 5.1 (O2) |
| · Label | 5.1 |

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· IMDG, IATA


· Class	5.1
· Label	5.1

· Packing group

· DOT, ADR/RID/ADN, IMDG, IATA	III
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· Environmental hazards

· Marine pollutant:	No
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· Special precautions for user

Warning: Oxidizing substances

· Danger code (Kemler):	50
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· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

· Transport/Additional information:
· DOT


Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 kg each.

· ADR/RID/ADN


Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 kg each.

· IMDG


Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 kg each.

· IATA


Limited Quantity for packages less than 30 kg gross and inner packagings less than 1 kg each / 10 kg net.

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- SARA

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· Section 302 (extremely hazardous substances):

None of the ingredients are listed.

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

7757-79-1 Potassium nitrate

6484-52-2 Ammonium nitrate

· TSCA (Toxic Substances Control Act)

All ingredients are listed or exempt.

· Proposition 65 (California)**· Chemicals known to cause cancer:**

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· EPA (Environmental Protection Agency):

1303-96-4 Disodium tetraborate, decahydrate

I (oral)

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· Canadian Domestic Substances List (DSL):

All ingredients are listed or exempt.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

Ox. Sol. 2: Oxidizing solids – Category 2

Ox. Sol. 3: Oxidizing solids – Category 3

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Repr. 1B: Reproductive toxicity – Category 1B

· Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/)

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Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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