

## 1. Identification

**Product identifier** Rejuvenate Seed Treatment™

**Other means of identification**

**SDS number** 442

**Recommended use** Plant growth regulator.

**Recommended restrictions** Keep out of the Reach of Children!

**Product registration number** 5481-580; 87320-2; 87320-2-5481

### Manufacturer/Importer/Supplier/Distributor information

#### Manufacturer

**Company name** AMVAC Chemical Corporation

**Address** 4100 E Washington Blvd  
Los Angeles, CA 90023 USA

**Telephone** AMVAC Chemical Corp 323-264-3910  
AMVAC Chemical Corp 323-268-1028 (FAX)

**Website** www.Amvac-Chemical.com

**E-mail** CustServ@Amvac-Chemical.com

**Emergency phone number**

Medical	888-681-4261
CHEMTREC® (USA+Canada)	800-424-9300
Product Use	888-462-6822
CHEMTREC® (Outside USA)	+1-703-527-3887

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Acute toxicity, inhalation Category 4  
Serious eye damage/eye irritation Category 2B

**Environmental hazards** Hazardous to the aquatic environment, acute hazard Category 3

**OSHA defined hazards** Not classified.

**Label elements**



**Signal word** Warning

**Hazard statement** Harmful if inhaled. Causes eye irritation. Harmful to aquatic life.

**Precautionary statement**

**Prevention** Avoid breathing vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment.

**Response** If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If eye irritation persists: Get medical advice/attention.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## Supplemental information

United States Environmental Protection Agency Labeling Requirements: This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS.

CAUTION. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, and clothing.

### ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Do not contaminate irrigation ditches or water used for irrigation or domestic purposes. Do not apply when weather conditions favor drift from areas treated. Do not use in a greenhouse.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
1-NAPHTHALENEACETIC ACID, POTASSIUM SALT		15165-79-4	6.25

## 4. First-aid measures

### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

### Skin contact

Wash off with soap and water. Get medical attention if irritation develops and persists.

### Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

### Ingestion

Rinse mouth. Immediately give large quantities of water to drink. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. Get medical attention if symptoms occur. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

### Most important symptoms/effects, acute and delayed

Ingestion may cause inebriation, headache, nausea, vomiting and abdominal pain. Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

### General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

### Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

### Unsuitable extinguishing media

Not available.

### Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed. This product is flammable only when evaporated and heated in a direct flame.

### Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

### Fire fighting equipment/instructions

Move 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** No unusual fire or explosion hazards noted. This product is flammable only when evaporated and heated in a direct flame.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. 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** Stop the flow of material, if this is without risk, to prevent entry into waterways, sewer, basements or confined areas. Dike the spilled material, where this is possible to prevent contamination of local water sources. Siphon the majority of the liquid into drums for use or disposal, depending on the circumstances. Siphon the majority of the liquid into drums for use or disposal, depending on the circumstances. Absorb spill with vermiculite or other inert material. Collect and dispose of spillage as indicated in section 13 of the SDS.

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

**Environmental precautions** Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

## 7. Handling and storage

**Precautions for safe handling** Avoid inhalation of vapors and spray mists. Avoid contact with eyes. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Keep away from food, drink and animal feedstuffs. Keep out of the reach of children. Keep away from other pesticides. Avoid release to the environment.

**Conditions for safe storage, including any incompatibilities** Do not allow material to freeze. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Keep out of the reach of children.

## 8. Exposure controls/personal protection

**Occupational exposure limits** No exposure limits noted for ingredient(s).

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls** General ventilation normally adequate. Provide eyewash station.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Do not get in eyes. Wear safety glasses with side shields (or goggles).

#### Skin protection

**Hand protection** Wear appropriate chemical resistant gloves.

#### Other

Long-sleeved shirt and long pants or coveralls, socks and closed toe shoes are required.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations** 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.

## 9. Physical and chemical properties

### Appearance

**Physical state** Liquid.

**Form** Liquid.

**Color** Colorless to light amber

**Odor** Odorless.

**Odor threshold** Not available.

**pH** 9 - 10 (as is)

**Melting point/freezing point** 30 °F (-1 °C)

**Initial boiling point and boiling range** 214 °F (101 °C)

**Flash point** Not available.

**Evaporation rate** 1 (as compared to water).

**Flammability (solid, gas)** Not applicable.

**Upper/lower flammability or explosive limits**

<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.

**Vapor pressure** 1.70E+01 mm Hg (solvent) (68 °F (20 °C))

**Vapor density** Same as water

**Relative density** Not available.

**Solubility(ies)**

<b>Solubility (water)</b>	Miscible
<b>Solubility (other)</b>	Soluble in alcohols

**Auto-ignition temperature** Not available.

**Decomposition temperature** Not available.

**Viscosity** Not available.

**Other information**

<b>Density</b>	8.48 lb/gal
<b>Miscible (water)</b>	Yes
<b>Percent volatile</b>	93.75 %
<b>Specific gravity</b>	1.016 at 20 C/4 C

**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** Contact with incompatible materials.

**Incompatible materials** Acids. Addition of acids to the product will cause Naphthaleneacid to precipitate from the solution.

**Hazardous decomposition products** Upon decomposition this product emits acid dense smoke with carbon dioxide, carbon monoxide, water and other products of combustion.

**11. Toxicological information****Information on likely routes of exposure**

<b>Inhalation</b>	Harmful if inhaled.
<b>Skin contact</b>	Prolonged skin contact may cause temporary irritation.
<b>Eye contact</b>	Causes mild eye irritation.
<b>Ingestion</b>	Not available.

**Symptoms related to the physical, chemical and toxicological characteristics** Ingestion may cause inebriation, headache, nausea, vomiting and abdominal pain. Irritation of eyes. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

**Information on toxicological effects**

**Acute toxicity** Harmful if inhaled.

<b>Product</b>	<b>Species</b>	<b>Test Results</b>
Rejuvenate Seed Treatment™		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Inhalation</b>		
LC50	Rat	> 2.54 mg/l (aerosol)
<b>Oral</b>		
LD50	Rat	5647 mg/kg

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.  
**Irritation Corrosion - Skin**  
Rejuvenate Seed Treatment™ , Tox Cat IV  
Result: Minimally irritating

**Serious eye damage/eye irritation** Causes eye irritation.  
**Irritation Corrosion - Eye**  
Rejuvenate Seed Treatment™ , Tox Cat III  
Result: Mildly irritating

**Respiratory or skin sensitization**  
**Respiratory sensitization** Not available.  
**Skin sensitization** This product is not expected to cause skin sensitization.  
**Skin sensitization**  
Rejuvenate Seed Treatment™ Result: 1-NAA Acid: Not a skin sensitizer

**Germ cell mutagenicity** Not genotoxic based on in vivo testing with 1-Naphthaleneacetic acid, Sodium salt.  
**Carcinogenicity** Not carcinogenic. There was no evidence of carcinogenicity from laboratory studies carried out on 1-Naphthaleneacetic Acid and 1-Naphthaleneacetamide in rodents.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects. A study carried out on Technical 1-Naphthaleneacetic acid, Sodium Salt, has shown no effects on reproductive toxicity. At the highest dose level tested there was some evidence of parental toxicity with accompanying associated effects on offspring survival and growth. Tests carried out on Technical 1-Naphthaleneacetic acid have shown no effects on developmental toxicity.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not an aspiration hazard

**Chronic effects** Prolonged inhalation may be harmful.

**12. Ecological information**

**Ecotoxicity** Harmful to aquatic life with long lasting effects. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark.

Components	Species	Test Results
1-NAPHTHALENEACETIC ACID, POTASSIUM SALT (CAS 15165-79-4)		
<b>Aquatic</b>		
Fish	LC50 Coho salmon,silver salmon (Oncorhynchus kisutch)	47 - 117 mg/l, 96 hours

\* 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.

**Other adverse effects** None known.

**13. Disposal considerations**

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site according to all applicable regulations. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with all applicable 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 container and residues in accordance with all applicable 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**

Empty containers should be taken to an approved waste handling site for recycling or disposal in accordance with all applicable regulations. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

**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 the IBC Code** Not established.

**15. Regulatory information****US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. This product is registered under EPA/FIFRA Regulations. It is a violation of Federal Law to use this product in any manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

**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 listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****Hazard categories**

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

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**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 (SDWA)** Not regulated.

**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. Massachusetts RTK - Substance List**

Not regulated.

**US. New Jersey Worker and Community Right-to-Know Act**

Not listed.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Not listed.

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision****Issue date** 04-17-2015

**References**

ACGIH®: American Conference of Governmental Industrial Hygienists  
 CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act  
 EPA: Environmental Protection Agency  
 FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act  
 IARC: International Agency for Research on Cancer  
 NTP: National Toxicology Program  
 OSHA: Occupational Safety and Health Agency  
 SARA: Superfund Amendments and Reauthorization Act  
 TSCA: Toxic Substances Control Act  
 DOT: Department of Transportation  
 IMDG: International Maritime Dangerous Goods  
 IATA: International Air Transport Association

**Version #** 01**Further information** Not available.

**HMIS® ratings**

Health: 3  
 Flammability: 1  
 Physical hazard: 0

**NFPA ratings**

Health: 3  
 Flammability: 1  
 Instability: 0

**Disclaimer**

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