

## *Recover RX 3-18-18 with Salicylic Acid*

### Section 1 -- IDENTIFICATION

#### 1.1. Product Identifier

**Product name:**

**Recover RX 3-18-18**

**Synonym:**

Liquid fertilizer solution with Salicylic acid and Phosphorus sources

#### 1.2. Recommended Use / Restrictions

**Identified Uses:**

For turf, ornamentals, trees (including citrus), crops (including vegetable) & hydroponics

**Restrictions:**

N/A

#### 1.3. Supplier Details

**Company:**

Growth Products, Ltd.  
80 Lafayette Avenue  
White Plains, NY 10603-1603 USA  
+011 914-428-1316 (9 am - 5 pm EST Mon - Fri)  
questions@growthproducts.com

#### 1.4. Emergency Telephone Number

**Emergency Telephone:**

800-222-1222 (American Association of Poison Control Centers)

### Section 2 -- HAZARD(S) IDENTIFICATION

#### 2.1. Classification of substance or mixture

**Target Organs:**

Eyes, Skin, Respiratory System

**Physical Hazards:**

Not Classified

**Health Hazards:**

Acute Tox., Oral 4 - H302

Skin Irrit. 2 - H315

Eye Irrit. 2B - H320

STOT SE 3 - H335

**Environmental Hazards:**

Not Classified

#### 2.2. Label Elements

**Pictogram:**



**Signal Word:**

WARNING!

**Hazard Statements:**

H302 Harmful if swallowed

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

**Precautionary Statements:**

P261 Avoid breathing mist/vapours/spray

P264 Wash hands/face/exposed skin thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P271 Use only outdoors or in a well-ventilated area

P280 Wear protective gloves/eye and face protection

P301+P312+P330 IF SWALLOWED: Call a Poison Center/doctor if you feel unwell. Rinse mouth.

**Precautionary Statements continued...**

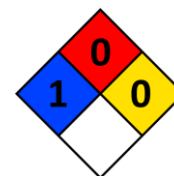
P302+P352 IF ON SKIN: Wash with plenty of water  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P332+P313 If skin irritation or rash occurs: Get medical advice/attention  
 P337+P313 If eye irritation persists: Get medical advice/attention  
 P362+P364 Take off contaminated clothing and wash it before reuse  
 P403+P233+P405 Store in a well-ventilated place. Keep container tightly closed. Store locked up.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

**2.3. Other Hazards**

This product does not contain any substance classified as PBT or vPvB

**NFPA Ratings**

<b>Health:</b>	<b>1</b>	Slightly hazardous
<b>Flammability:</b>	<b>0</b>	Will not burn
<b>Reactivity:</b>	<b>0</b>	Stable
<b>Specific Hazard:</b>	<b>N/A</b>	Not applicable



**HMIS Ratings**

<b>Health:</b>	<b>1</b>	Minor hazard
<b>Flammability:</b>	<b>0</b>	Minimal hazard
<b>Reactivity:</b>	<b>0</b>	Minimal hazard
<b>Personal (PPE):</b>	<b>C</b>	Goggles, Gloves, Protective Apron

<b>Health</b>	<i>minor</i>	<b>1</b>
<b>Flammability</b>	<i>minimal</i>	<b>0</b>
<b>Physical Hazard</b>	<i>minimal</i>	<b>0</b>
<b>Personal Protection</b>		<b>C</b>

**Section 3 -- COMPOSITION/INFORMATION ON INGREDIENTS**

**3.2. Mixtures**

Chemical Name	CAS Registry No.	REACH No.	ENECs No.	Classification
Urea:	57-13-6	012119463277-33	200-315-5	GHS-US Skin Irrit. 2 - H315 Eye Irrit. 2A - H320 STOT SE 3 - H335
Potassium hydroxide:	1310-58-3	-	-	GHS-OSHA Corr. Met. 1 - H290 Acute Tox., Oral 5 - H303 Skin Corr. Irrit. 1A/1C - H314 Eye Dam. Irrit. 1 - H318 Aquatic Tox., Acute - H402
Methylene diurea:	13547-17-6	-	-	GHS-US Eye Irrit. 2A - H319
Phosphoric acid:	7664-38-2	01-2119485924-24	231-633-2	GHS-US Skin Corr. 1B - H314 Met. Corr. 1 - H290
Salicylic acid:	69-72-7	-	-	GHS-(EC) Acute Tox., Oral 4 - H302 Eye Dam. Irrit. 1 - H318
Monopotassium phosphite:	13977-65-6	-	231-913-4	Not classified
Dipotassium phosphite:	13492-26-7	-	236-809-2	Not classified

**Section 4 -- FIRST-AID MEASURES****4.1. Description of first-aid measures**

<b>Inhalation:</b>	Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if symptoms are severe or persist.
<b>Ingestion:</b>	Never give anything by mouth to an unconscious person. Do not induce vomiting, unless instructed by a healthcare professional. Rinse mouth thoroughly with water. Get medical attention if any symptoms develop.
<b>Skin Contact:</b>	Remove affected person from source of contamination. Take off immediately all contaminated clothing and wash it before reuse. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
<b>Eye Contact:</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

**4.2. Most important symptoms and effect, both acute and delayed**

<b>Inhalation:</b>	May cause respiratory irritation. There may be irritation of the throat with a feeling of tightness in the chest.
<b>Ingestion:</b>	Ingestion may cause nausea, vomiting and stomach and digestive irritation. There may be soreness and redness of the mouth and throat.
<b>Skin Contact:</b>	Skin contact may cause redness and irritation. Prolonged or repeated skin contact can result in the development of allergy-like skin reactions (e.g., dermatitis, rashes)
<b>Eye Contact:</b>	There may be irritation and redness. Profuse watering of the eyes.

**4.3. Indication of any immediate medical attention and special treatment needed**

<b>Notes for doctor:</b>	No specific recommendations. If in doubt, get medical attention promptly. Treatment may vary with the condition of victim and specifics of incident.
<b>Specific treatments:</b>	Eye bathing equipment should be available on the premises.

**Section 5 -- FIREFIGHTING MEASURES****5.1. Extinguishing media**

**Suitable extinguishing media:** The product is not flammable. Use fire-extinguishing media suitable for the surrounding environment. The substance itself does not burn.

**Unsuitable extinguishing media:** N/A

**Environmental Hazards:**

**5.2. Special hazards arising from the substance or mixture**

**Hazardous combustion products:** N/A

**5.3. Advice for firefighters****Protective actions during firefighting:**

No specific firefighting precautions known. Irritant, non-flammable, water soluble, upon contact with water pressure generates foam. Do not inhale gases created by fire. Do not allow run-off from firefighting to enter drains or watercourses.

**Special protective equipment for firefighters:**

Wear positive-pressure self-contained breathing apparatus (SCBA) eye protection and appropriate protective clothing.

**Section 6 -- ACCIDENTAL RELEASE MEASURES****6.1. Personal precautions, protective equipment and emergency procedures****Personal precautions:**

Wear protective clothing as described in Section 8 of this safety data sheet.

**6.2. Environmental precautions****Environmental precautions:**

Avoid the spillage or runoff entering drains, sewers or watercourses.

**6.3. Methods and material for containment and cleanup****Methods for cleaning up:**

Stop leak if possible without risk. Contain and absorb spillage with sand, earth or other noncombustible material. Transfer to a container for disposal. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

**6.4. Reference to other sections****Reference to other sections:**

For personal protection, see Section 8. For waste disposal, see Section 13.

**Section 7 -- HANDLING AND STORAGE****7.1. Precautions for Safe Handling****Using precautions:**

Provide adequate ventilation. Avoid spilling. Avoid contact with skin and eyes. Wash hands thoroughly after handling.

**Advice on general occupational hygiene:**

Do not eat, drink or smoke when using this product. Remove contaminated clothing and protective equipment before entering eating areas.

**7.2. Conditions for Safe Storage, Including Any Incompatibilities****Storage precautions:**

Store in tightly closed original container in a dry, cool and well-ventilated place. Store at temperatures above 5°C. Keep away from heat and direct sunlight. Keep away from food, drink and animal feeding stuffs.

**7.3. Specific end use(s)****Specific end use(s)**

The identified uses for this product are detailed in Section 1.2.

## Section 8 -- EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1. Control Parameters

#### Occupational exposure limits

Material	Type	Value	Source
Urea (CAS 57-13-6):	ACGIH TWA OSHA PEL (TWA)	10 mg/m <sup>3</sup> - inhalation particulate 5 mg/m <sup>3</sup> - Respirable (particulate)	USA ACGIH USA OSHA
Potassium hydroxide (CAS 1310-58-3):	ACGIH TLV	2 mg/m <sup>3</sup> (ceiling)	USA ACGIH
Methylene diurea (CAS 13547-17-6):	N/A	N/A	N/A
Phosphoric acid (CAS 7664-38-2):	ACGIH TLV OSHA PEL GER MAK NIOSH REL DNEL	1 mg/m <sup>3</sup> (TWA), 3 mg/m <sup>3</sup> (STEL) 1 mg/m <sup>3</sup> (TWA) 2 mg/m <sup>3</sup> (TWA), inhalable 1 mg/m <sup>3</sup> (TWA), 3 mg/m <sup>3</sup> (STEL) 2.92 mg/m <sup>3</sup> , inhalation	OSHA ACGIH GER MAK NIOSH
Salicylic acid (CAS 69-72-7):	OSHA	1 mg/m <sup>3</sup> , 3 mg/m <sup>3</sup> , 16 mg/m <sup>3</sup> , inhalation 2 mg/m <sup>3</sup> , skin contact	Manufacturer
Monopotassium phosphite (CAS 13977-65-6):	N/A	N/A	N/A
Dipotassium phosphite (CAS 13492-26-7):	N/A	N/A	N/A

#### Protective equipment

##### General information:

Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

##### Appropriate engineering controls:

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation.

##### Eye / face protection:

Use chemical splash-type goggles. Face shield.

##### Hand protection:

For hand protection, wear approved gloves made of nitrile, PVC, or neoprene. Thoroughly rinse the outside of gloves with water prior to removal. Inspect regularly for leaks.

##### Other skin and body protection:

For body protection wear suitable protective clothing.

##### Hygiene measures:

Avoid breathing vapors, mist or gas. Clean water should be available for washing in case of eye or skin contamination.

##### Respiratory protection:

If concentrations in excess of 10 ppm are expected, use NIOSH/DHHS approved self-contained breathing apparatus (SCBA) or other approved air-supplied respirator (ASR) equipment (e.g., a full-face airline respirator (ALR)).

##### Environmental exposure controls:

Eye bathing equipment should be available on the premises. Provide quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

#### Equipment:

HMIS Letter:

**C**



**Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES**
**9.1. Information on basic physical and chemical properties**

<b>Physical State:</b>	Liquid	<b>Evaporation Rate:</b>	Same as water
<b>Color</b>	Dark Brown	<b>Boiling Point:</b>	About 212°F / 100°C
<b>Odor:</b>	Mild Earthy Odor	<b>Freezing Point:</b>	32°F / 0°C
<b>Weight per Gallon / Liter:</b>	10# @ 70°F / 1.2 Kg @ 21°C	<b>Viscosity:</b>	1-10 cps @ 21 Degrees C
<b>Storage Life at 70F:</b>	>2 years	<b>Flash Point/Method:</b>	Noncombustible
<b>pH – 21C:</b>	4.6	<b>Vapor Pressure:</b>	Equivalent to water
<b>Solubility:</b>	Completely Miscible	<b>Storage Temperature:</b>	Above 32°F / 0°C

**Section 10 -- STABILITY AND REACTIVITY**
**10.1. Reactivity**

**Reactivity:** Stable

**10.2. Chemical Stability**

**Stability:** Stable under normal recommended storage conditions.

**10.3. Possibility of Hazardous Reactions**

**Possibility of hazardous reactions:** N/E

**10.4 Conditions to Avoid**

**Conditions to avoid:** Exposure to extreme temperatures and incompatible materials

**10.5 Incompatible Materials**

**Materials to avoid:** N/E

**10.6 Hazardous Decomposition Products**

**Hazardous decomposition products:** N/E

**Section 11 -- TOXICOLOGICAL INFORMATION**
**11.1. Information on Toxicological Effects**

**Toxicological effects:** N/E. No data available.

**11.2 Toxological information on main components of the mixture:**

N/E. No data available.

**Section 12 -- ECOLOGICAL INFORMATION**
**Ecotoxicity:**
**12.1. Toxicity**

N/A

**12.2. Persistence and degradability**

**Persistence and Degradability:** N/E

**12.3. Bioaccumulative potential**

**Bioaccumulative potential:** N/A

**Partition coefficient:**
**12.4. Mobility in Soil**

**Mobility:** N/A

**12.5. Results of PBT and vPvB Assessment**

Not listed in EIS PBT List.

**12.6. Other Adverse Effects**

**Other adverse effects:** N/E

**Section 13 -- DISPOSAL CONSIDERATIONS****13.1. Waste Treatment Methods****Disposal methods:**

Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product, residue and/or container.

The information offered in Section 13 is for the product as shipped.

**Section 14 -- TRANSPORTATION INFORMATION****General**

Product is not flammable, not corrosive, not explosive and not radioactive.

**14.1. UN Number**

N/A

**14.2. UN Proper Shipping Name**

N/A

**14.3. Transport Hazard Class(es)**

N/A

**14.4. Packing Group**

N/A

**14.5. Environmental Hazards**

N/A

**14.6. Special Precautions for User****14.7. Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code**

N/A

**Section 15 -- REGULATORY INFORMATION****15.1. Safety, health and Environmental Regulations / Legislation Specific for the Substance or Mixture****EU legislation:**

This product is labeled in accordance EU directives. The Dangerous Substance Directive (Directive (67/548/EEC, "DSD"), The Dangerous Preparations Directive (Directive 1999/45/EC, "DPD") and the new regulations classification, labeling and packaging of substances and mixtures, Regulation (EC) No 1272/2008 of the European Parliament and the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Commission Regulation (EU) No 453/2010 of May 2010. USA-FDA Title 21 CFR 172.510. Flavoring agents and related substances. FEMA GRAS number 3121.

**US Federal**

CAS 69-72-7 is listed on the TSCA inventory. SARA code for CAS # 69-72-7: acute, chronic. None listed under TSCA Section 12b. None of the materials have SNUR under TSCA. None of the materials have an RQ under SARA Section 302.

**15.2. Chemical Safety Assessment**

See Section 2.3 for NFPA & HMIS Ratings

**REVISED DATE: 16 May 2016****Other Precautions:****Abbreviations / Acronyms:****Read entire label before using**

N/E	Not Established	N/A	Not applicable
ACGIH	American Conference of Governmental Industrial Hygienists		
TLV	Threshold Limit Values		
PEL	Permissible Exposure Limit		
REL	Recommended Exposure Limit		
OSHA	Occupational Safety and Health Administration		
NIOSH	National Institute for Occupational Safety and Health		
TWA	Time Weighted Average over 8 hours of work		
TLV	Threshold Limit Value over 8 hours of work		
REL	Recommended Exposure Limit		
PEL	Permissible Exposure Limit		
STEL	Short Term Exposure Limit during x minutes		
IDLH	Immediately Dangerous to Life or Health		
TSCA	Toxic substance Control Act (United States)		
DSL	Domestic Substance List (Canada)		
EINECS	European Inventory of Existing Commercial Chemical Substances (Europe)		
ELINCS	European List of Notified Chemical Substances (Europe)		
ENCS	Existing Chemical Substances		
IECSC	Inventory of Existing Chemical Substances		
KECL	Korea Existing Chemicals Inventory		
PICCS	Philippines Inventory of Chemical and Chemical Substances		
AICS	Australian Inventory of Chemical Substances		
NZIoC	New Zealand Inventory of Chemicals		
HMIS	Hazardous Material Identification System (American Coatings Association)		
NFPA	National Fire Protection Association		
PBT	Persistent Bioaccumulative and Toxic		
vPvB	Very Persistent and very Bioaccumulative		
STOT SE	Specific Target Organ Toxicity; Single Exposure		
STOT RE	Specific Target Organ Toxicity; Repeated Exposure		
GER-MAK	Germany Maximum Workplace Concentration		

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