

# SAFETY DATA SHEET

Trade Name: Rebound Cobalt™ Version: 1.3 2018

Version Date: December 11,

# 1. PRODUCT AND COMPANY IDENTIFICATION

 Product identifiers

 Product name
 : Rebound Cobalt™

 Other Names
 : Rebound Cobalt™ nutrient solution

 CAS-No.
 : NA

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : For use in fertilizer applications.

## **1.3 Details of the supplier of the safety data sheet** Manufactured by: Advancing Eco Agriculture, LLC.

4551 Parks West Road Middlefield, Ohio 44062 United States : +1 440-632-1012 : info@advancingecoag.com

## 1.4 Emergency telephone number

Emergency Phone # : +1 440-723-2916

# 2. HAZARDS IDENTIFICATION

Telephone

Email

# 2.1 Classification of the substance or mixture

## **GHS Classification**

Skin sensitization: Category 1 Serious eye damage/eye irritation: Category 2 Respiratory sensitization: Category 1 Reproductive toxicity: Category 2 Carcinogenicity: Category 1B Specific Target Organ Toxicity: Category 2 repeated exposure Acute Aquatic toxicity: Category 1 Chronic Aquatic toxicity: Category 1

# 2.2 GHS Label elements, including precautionary statements



Pictogram

Signal word	Danger
Hazard statement(s)	
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H350i	May cause cancer by inhalation
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
Precautionary statement(	S)
P102	Keep out of reach of children

P202 Do not handle until all safety precautions have been read and understood



P261	Avoid breathing mist/spray
P264	Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear eye protection/face protection/skin protection.
P284	In case of inadequate ventilation, wear respiratory protection
P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,
	if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: 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.
P391	Collect spillage.
P501	Dispose of contents/ container to an approved waste disposal plant.

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - None

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

## 3.1 Substances

#### Hazardous components

Component	Classification	Concentration*		
Citric Acid				
CAS Number: 7 <mark>7-92-9</mark>	Eye Irrit. 2; H319	1-3%		
Cobalt Sulfate				
CAS Number: 10124-43-3	Ac. Tox. 4: H302; Eye Irrit. 2A: H319; Skin Sens. 1: H317; Resp. Sens. 1: H334 & H335; Carc. 1B: H350i; Rep. 2: H361; STOT 2 & 3: H373; Cr. Aqua. Tox. 1: H410	9-11%		
* Approximate weight percent. Exact weight percent is withheld as a trade secret.				

## 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact Wash off with soap and plenty of water. Consult a physician. In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If swallowed Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in Section 2.2 and/or in Section 11.

**4.3 Indication of any immediate medical attention and special treatment needed** No data available

## **5. FIREFIGHTING MEASURES**

## 5.1 Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture No data available



## 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information No data available

## 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate non-essential personnel to safe areas. For personal protection see section 8.

## 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into waterways should be avoided.

- 6.3 Methods and materials for containment and cleaning up Soak up or vacuum without creating mists. Keep in suitable, closed containers for disposal.
- 6.4 Reference to other sections For disposal see section 13.

#### 7. HANDLING AND STORAGE

- 7.1 Precautions for safe handling Avoid contact with skin and eyes. Avoid formation of mists/aerosols. Provide appropriate ventilation. For precautions see section 2.2.
- 7.2 Conditions for safe storage, including any incompatibilities Keep container tightly closed in a dry and well-ventilated place.
- 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

Contains cobalt sulfate with an OSHA PEL of 0.1 mg/m<sup>3</sup> TWA and an ACGIH TLV of 0.02 mg/m<sup>3</sup>.

#### 8.2 Exposure controls

## Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

#### Personal protective equipment

#### Eye/face protection

Wear safety glasses with splash guards when mixing. Use equipment for eye protection tested and approved under appropriate standards such as NIOSH (US) or EN 166(EU).

#### **Skin protection**

Wear standard work clothing (long pants and long-sleeved shirt) to protect from skin exposure. Nonreactive nitrile gloves should be worn. Use proper glove removal techniques to avoid skin exposure. Wash and dry hands after using the product. Wash any contaminated clothing prior to re-use.

#### **Body Protection**

Wear standard work clothing (long pants, long-sleeved shirt, leather or composite footwear covering entire foot).

#### **Respiratory protection**

In the case of mist or aerosol formation, use respirator with an approved filter. Use NIOSH-approved respiratory protection.

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into waterways must be avoided.



# 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

5.1 Information on basic physical and chen	iicai properties
a) Appearance	Form: liquid Color: dark brown
b) Odor	No data available
c) Odor Threshold	No data available
e) pH	2.2 at 25 °C (77 °F)
f) Melting/freezing point	~0°C (32°F)
g)Initial boiling point and boiling range	~100°C (212°F)
h)Flash point	No data available
i) Evaporation rate	No data available
j) Flammability	No data available
k) Upper/lower flammability or explosive limit	No data available
I) Vapor pressure	No data available
m) Vapor density	No data available
n) Relative density	9.2 lbs. per gallon
o) Water solubility	No data available
p) Partition coefficient n-octanol/water	No data available
q) Auto-ignition temperature	No data available
r) Decomposition temperature	No data available
s) Viscosity	No data available
t) Explosive properties	No data available
u) Oxidizing properties	No data available
9.2 Other safety information	

No data available

# 10. STABILITY AND REACTIVITY

- 10.1 Reactivity No data available
- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** No data available
- **10.4 Conditions to avoid** Exposure to sunlight, freezing temperatures or heat sources
- **10.5** Incompatible materials Strong bases

## **10.6 Hazardous decomposition products** Hazardous decomposition products formed under fire conditions – No data available Other decomposition products - No data available. In the event of fire: see section 5.

# **11. TOXICOLOGICAL INFORMATION**

## 11.1 Information on toxicological effects

#### Acute toxicity

Oral:	ATE <sub>mix</sub> ≥ 5000
Inhalation:	No data available
Dermal:	No data available

Skin corrosion/irritation

No data available.

## Serious eye damage/eye irritation

This product contains materials that cause serious eye irritation.



## Respiratory or skin sensitization

This product contains materials that cause respiratory and skin sensitization

## Germ cell mutagenicity

No data available

#### Carcinogenicity

IARC: This product contains cobalt sulfate, identified as Group 2B: possibly carcinogenic to humans.

ACGIH: This product contains cobalt sulfate, identified as a potential carcinogen by ACGIH.

Cal. Prop. 65: WARNING: This product contains a material (cobalt sulfate) known to the State of California to

cause cancer.

#### **Reproductive toxicity**

This product contains a material (cobalt sulfate) suspected of damaging fertility or the unborn child.

Specific target organ toxicity - single exposure No data available Specific target organ toxicity - repeated exposure No data available Aspiration hazard No data available

## **12. ECOLOGICAL INFORMATION**

## 12.1 Toxicity

This product contains a material (cobalt sulfate) at a concentration that requires categorization as Category 1 Acute Aquatic toxicity and as Category 1 Chronic Aquatic toxicity. While no testing was conducted, the summation method (GHS Purple Book, Seventh Edition, Chapter 4.1) indicates the expected EC50 for fish, crustacea and algae to be ≤1mg/L.

- 12.2 Persistence and degradability No data available
- 12.3 Bio-accumulative potential No data available
- 12.4 Mobility in soil No data available

#### 12.5 Other adverse effects

Results of PBT and vPvB assessment No data available

## **13. DISPOSAL CONSIDERATIONS**

#### 13.1 Waste treatment methods

Contact a licensed professional waste disposal service to dispose of this material.

#### **Contaminated packaging**

Dispose of as unused product.

# **14. TRANSPORT INFORMATION**

#### **TDG** (Canada)

UN number: 3082 Class: 9 Packing group: III Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (cobalt sulfate) Marine pollutant

DOT (US)

UN number: 3082 Class: 9 Packing group: III Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (cobalt sulfate) Marine pollutant.

ΙΑΤΑ

UN number: 3082 Class: 9 Packing group: III Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (cobalt sulfate)



## IMDG

UN number: 3082 Class: 9 Packing group: III EMS-No: F-A, S-F Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (cobalt sulphate) Marine pollutant

## **15. REGULATORY INFORMATION**

This product has been classified in accordance with OSHA Hazard Communication Standard (HCS) 2012 (US), EU CLP Regulation No. 1272/2008 and Hazardous Products Regulations (HPR) (Canada).

No components of this product are reportable under SARA Sections 302.

This product may contribute to your facility reporting requirements under SARA Sections 311, 312 and/or 313. See Section 3 for a list of possibly affected chemicals.

Components of this product are listed on the TSCA, Canadian DSL and REACH inventories.

WARNING: This product contains a chemical known to the State of California to cause cancer.

#### **16. OTHER INFORMATION**

The information contained in this Safety Data Sheet (SDS) is correct to the best of our knowledge, understanding and belief at the date of publication. This SDS is not intended to be all inclusive or exhaustive and shall be used as guidance only. The information in this document is applicable only to the product with respect to appropriate safety precautions and may not be applicable to combinations with other products. It does not represent any guarantee of the properties of the product. Advancing Eco Agriculture, LLC and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.