# SAFETY DATA SHEET

# **Revolution 5 Agriculture**

Issue Date 06-Mar-2023	Revision Date 0	06-Mar-2023	Version 1		
1. PRODUCT AND COMPANY IDENTIFICATION					
Product identifier Product Name	Enersync P				
Other means of identification SDS#	QB-009				
Details of the supplier of the safety data sheet					
Company Name	Revolution 5 Ag 2258- Magnussen Place North Vancouver, B.C. V7J 3R6				
Emergency telephone number Emergency Telephone	778-835-5251				
	2. HAZARDS ID	DENTIFICATION			

## Classification

## **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A

### Label elements

### **Emergency Overview**

# Danger

Hazard statements

Causes severe skin burns and eye damage May cause cancer



Appearance Clear

Physical state Liquid

Odor Acidic

Precautionary Statements - Prevention Obtain special instructions before use

# EnerSync P \_\_\_\_

Do not handle until all safety precautions have been read and understood Use personal protective equipment as required Do not breathe dust/fume/gas/mist/vapors/spray Wash face, hands and any exposed skin thoroughly after handling

# Precautionary Statements - Response

Specific Treatment (See Section 4 on the SDS) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Immediately call a POISON CENTER or doctor/physician IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

# **Precautionary Statements - Storage**

Store locked up

# **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

# Hazards not otherwise classified (HNOC)

Other Information

• Very toxic to aquatic life with long lasting effects

Very toxic to aquatic life

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Phosphoric Acid	7664-38-2	15-40	*
Sulfuric Acid	7664-93-9	1-5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

# 4. FIRST AID MEASURES

First aid measures	
General advice	Immediate medical attention is required.
Skin Contact	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Eye contact	Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.
Inhalation	Remove to fresh air. Call a physician or poison control center immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Ingestion	Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Remove from exposure, lie down. Clean mouth with water and drink afterwards plenty of water. Call a physician or poison control center immediately.
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

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

Symptoms	Any additional important symptoms and effects are described in Section 11: Toxicology Information.
Indication of any immediate medica	l attention and special treatment needed
Note to physicians	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

# **5. FIRE-FIGHTING MEASURES**

### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

## Specific hazards arising from the chemical

The product causes burn of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

# Explosion data Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES				
Personal precautions, protective equipment and emergency procedures				
Personal precautions	Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.			
Environmental precautions				
Environmental precautions	Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.			
Methods and material for containm	ent and cleaning up			
Methods for containment	Prevent further leakage or spillage if safe to do so.			
Methods for cleaning up	Soak up with inert absorbent material. Clean contaminated surface thoroughly. Dike far ahead of liquid spill for later disposal. Take up mechanically, placing in appropriate containers for disposal. Prevent product from entering drains. Dam up. After cleaning, flush away traces with water.			
7. HANDLING AND STORAGE				

### Precautions for safe handling

Advice on safe handling Use personal protective equipment as required. Ensure adequate ventilation, especially in

confined areas. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems.

# Conditions for safe storage, including any incompatibilities

Storage ConditionsKeep container tightly closed in a dry and well-ventilated place. Keep out of the reach of<br/>children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in<br/>properly labeled containers.Incompatible materialsIncompatible with strong acids and bases. Incompatible with oxidizing agents.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

Exposure Guidelines Exposure guidelines noted for ingredient(s).					
Chemical Name ACGIH TLV OSHA PEL					
TWA: 0.2 mg/m <sup>3</sup> thoracic	TWA: 1 mg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup>			
particulate matter	(vacated) TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>			
	ACGIH TLV TWA: 0.2 mg/m <sup>3</sup> thoracic	ACGIH TLV OSHA PEL   TWA: 0.2 mg/m³ thoracic TWA: 1 mg/m³			

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information	Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).
Appropriate engineering controls	

## **Engineering Controls** Showers, Eyewash stations & Ventilation systems. Individual protection measures, such as personal protective equipment Eye/face protection Tight sealing safety goggles. Face protection shield. Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. **Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Keep **General Hygiene** away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear
Color	Yellow/white
Odor	Acidic
Odor threshold	No Information available

# Property

Property	Values	Remarks	Method
рН	0.5-0.7		
Specific Gravity	1.2		
Viscosity	No Information available		
Melting point/freezing point	No Information available		
Flash point	Above 200°F		
Boiling point / boiling range	>= 100 °C / 212 ° F (at 760 mm Hg)		
Evaporation rate	No Information available		
Flammability (solid, gas)	No data available		
Flammability Limits in Air			
Upper flammability limit:	No Information available		
Lower flammability limit:	No Information available		
Vapor pressure	No Information available		
Vapor density	No Information available		
Water solubility	Complete		
Partition coefficient	No Information available		
Autoignition temperature	No Information available		
Decomposition temperature	No Information available		

# **Other Information**

Density Lbs/Gal VOC Content (%)

10.00 None

# **10. STABILITY AND REACTIVITY**

# Reactivity

No data available

<u>Chemical stability</u> Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

## **Conditions to avoid**

Exposure to air or moisture over prolonged periods.

### Incompatible materials

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

# **Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

# **11. TOXICOLOGICAL INFORMATION**

# Information on likely routes of exposure

Product Information	The primary effects and toxicity of this material are due to it corrosive nature.
Inhalation	Causes burns.
Eye contact	Corrosive to the eyes and may cause severe damage including blindness.
Skin Contact	The product causes burn of eyes, skin and mucous membranes.
Ingestion	Causes burns.

Chemical Name	Oral LD50	0	Dei	rmal LD50	Inhalation	LC50	
Phosphoric Acid 7664-38-2	= 1530 mg/kg (F	Rat)	2730	mg/kg (Rabbit)	>850 mg/m³ (Exposure	e time: 1 h) Rat	
Sulfuric Acid 7664-93-9	= 2140 mg/kg	(Rat)		-	= 510 mg/m <sup>3</sup>	( Rat ) 2 h	
Information on toxicological e	effects						
Symptoms	No Information	No Information available.					
Delayed and immediate effect	s as well as chronic	effects from	n short and I	ong-term expos	ure		
Corrosivity	Causes burns eyes.	Causes burns. Extremely corrosive and destructive to tissue. Risk of serious damage to eves.					
Sensitization	No Information	n available.					
Germ cell mutagenicity	No Information						
Carcinogenicity					d any ingredient as a		
Chemical Name	ACGIH	IA	-	NTP	0	SHA	
Sulfuric Acid 7664-93-9	A2	Gro	up 1	Known X		Х	
OSHA (Occupational Safety a X - Present Reproductive toxicity STOT - single exposure STOT - repeated exposure	No Information No Information No Information No Information	n available. n available.	Department	Γ Εάδοι)			
Chronic toxicity	Chronic expos necrosis. Bro common. Ga Possible risk o	Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risk of irreversible effects. May cause adverse liver effects.					
Target organ effects Aspiration hazard	•	EYES, Kidney, Liver, Respiratory system, Skin, Teeth. No Information available.					
Numerical measures of toxici	ty - Product Informat	tion					
Unknown Acute Toxicity	0% of the mix	ture consists	of ingredient	(s) of unknown to	xicity		
The following values are calc	ulated based on char	pter 3.1 of t	he GHS docu	iment .			
ATEmix (oral)		d based on chapter 3.1 of the GHS document . 8,513.00 mg/kg					
ATEmix (inhalation-dust/n							

# 12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a severe marine pollutant according to DOT

# Ecotoxicity

Sulfuric Acid	-	500: 96 h Brachydanio rerio mg/L	29: 24 h Daphnia magna mg/L
7664-93-9		LC50 static	EC50

# Persistence and degradability

No Information available.

### **Bioaccumulation**

No Information available.

Other adverse effects

No Information available

# **13. DISPOSAL CONSIDERATIONS**

# Waste treatment methods

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

### **Contaminated packaging** Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status	
Phosphoric Acid	Toxic	
7664-38-2	Corrosive	
Sulfuric Acid	Toxic	
7664-93-9	Corrosive	

# 14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

3264
Corrosive Liquid, Acidic, Inorganic, N.O.S. (Sulfuric Acid)
8
This product contains a chemical which is listed as a severe marine pollutant according to DOT.

# **15. REGULATORY INFORMATION**

International Inventories	
TSCA	Complies
DSL/NDSL	Complies

### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

# US Federal Regulations

# <u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical

# EnerSync P\_

or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %		
Sulfuric Acid - 7664-93-9	1.0		
SARA 311/312 Hazard Categories			
Acute health hazard	Yes		
Chronic Health Hazard	Yes		
Fire hazard	No		
Sudden release of pressure hazard	No		
Reactive Hazard	No		

### CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sulfuric Acid 7664-93-9	1000 lb	-	-	Х

# CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)	
Sulfuric Acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ	
JS State Regulations				

# California Proposition 65

This product contains chemicals known to the state of California to cause cancer, or birth defects or other reproductive harm

Chemical Name	California Proposition 65	
Sulfuric Acid - 7664-93-9	Carcinogen	

### U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sulfuric Acid	Х	Х	Х
7664-93-9			

U.S. EPA Label Information

### EPA Pesticide Registration Number Not Applicable

# WHMIS Hazard Class

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

D2A - Very toxic materials D2B - Toxic materials E - Corrosive material



16. OTHER INFORMATION						
NFPA	Health hazards	3	Flammability	0	Instability 0	Physical and Chemical Properties Yes
HMIS	Health hazards	3	Flammability	0	Physical hazards 0	Personal protection X
Issue Date Revision Date Revision Note No Information available Disclaimer	06-N	Mar-202	23			

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**