

1 Identification

GHS Product Identifier

Product name: RR SoyBooster® OP

Product form: Liquid mixture

Recommended use of the chemical and restriction on use

Liquid and foliar fertilizer

Supplier's details

Agro-100 Ltée.
 990 Chemin des Prairies
 Joliette, Québec
 Canada, J6E 0L4

Contact number: (450) 759-8887

Emergency number: (450) 759-8887

Opening Hours: 8 AM - 4 PM Monday to Friday

Emergency phone number

CANUTEC: 1-888-226-8832

**Association Canadienne
 des Centres Antipoison :** www.capcc.ca

2 Hazard(s) identification

Classification of the substance or mixture

Classification: GHS-CA

Acute toxicity (oral)	Category 4
Skin corrosion / irritation	Category 2
Serious eye damage/irritation	Category 2
Carcinogenicity	Category 1B

GHS label elements

Danger



Harmful if swallowed

Causes skin irritation

Causes serious eye irritation

May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Obtain special instructions before use.

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

Wash hands thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: call a POISON CENTER or doctor/physician

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Rinse mouth.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

Refer to manufacturer or supplier for information on recovery or recycling

Other hazards which do not result in classification

No additional information available

3 Composition/information on ingredients

Description	CAS Number	EINECS Number	%	Note
Ammonium Polyphosphate	68333-79-9		27 - 35	Acute tox 4 (oral) / Eye irritation 2B
Phosphoric acid 75%	7664-38-2		5.25 - 11.25	Skin corrosion 1B / Eye damage 1
potassium hydroxide	1310-58-3		7.23 - 14.36	Acute tox 4 (oral) / Eye irritation 1A / Eye damage 1
cobalt(II) sulfate	10124-43-3		0 - 0.015	Mutagene 2 / Carcen 1B / Reproduction 1B

4 First-aid measures

Description of necessary first-aid measures

FOLLOWING INHALATION	Remove to fresh air. If not breathing, give CPR. If breathing is difficult, provide oxygen as required by a qualified operator. Get medical attention once person can be moved.
FOLLOWING SKIN EXPOSURE	Wash off immediately with plenty of water. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Get medical immediately
FOLLOWING EYE EXPOSURE	Rinse immediately with plenty of water using an approved eye wash station. Rinse for at least 15 minutes keeping eye lids open with fingers. Get medical immediately
FOLLOWING INGESTION	Drink one or two glasses of water if conscious. Induce vomiting only if recommended by a physician. Get medical immediately

Most important symptoms/effects, acute and delayed

INHALATION	May cause respiratory tract irritation.
SKIN	Cause skin irritation including redness.

EYES	Cause serious eye irritation.
INGESTION	Harmful if swallowed. Will cause serious health hazard if swallowed.

Indication of immediate medical attention and special treatment needed, if necessary

NOTE TO PHYSICIAN: Treat symptomatically

5 Fire-fighting measures

Suitable extinguishing media

Use extinguishing agent suitable for the type of surrounding fire;
Foam, dry chemical, CO2, Water spray, Sand, water fog

Avoid heavy water stream to minimize runoff into the environment

Specific hazards arising from the chemical

In case of fire, hazardous decomposition products may be produced such as:
Sulphur oxides, Ammonia, Carbon monoxide, Carbon dioxide (CO2), Carbon monoxide

No direct explosion hazard. Prolonged exposure to fire may cause containers to rupture.

Special protective actions for fire-fighters

- Use water spray or fog to cool exposed containers.
- Do not enter fire area without proper protective equipment, including full face, positive pressure respiratory protection.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

- **P.P.E.**

Do not take any measure or actions that involves a personal risk or if not properly trained
Evacuate surroundings
Do not touch or walk in the spilled product
Try not to inhale any vapor or fog
Ensure proper ventilation
Make sure to wear an adequate mask or positive pressure apparatus if ventilation is not adequate
Wear proper PPE before entering in spill area.

Environmental precautions

Make sure not to let any product or contaminated water enter the environment, water ways or sewers
Advise proper authorities if product has entered the environment.
Stop leak if without risk by using absorbent material

Methods and materials for containment and cleaning up

Remove all containers from spill area
Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.
Collect all waste in suitable and labelled containers
Dispose according to local legislation.
Do not flush into surface water or sewer system.
Dispose through approved methods

7 Handling and storage

Precautions for safe handling

Wear P.P.E. when conditions increase the risk of exposure
Do not eat, drink or smoke in areas where this product is used or handled
People working with this product should wash their hands and face before they eat, drink or smoke
Avoid all contact with eyes, skin or clothing

Do not inhale vapors of fog
 Do not enter in an enclosed area unless proper ventilation is in place
 Keep in original sealed container until product is used
 Empty container may contain residues and can represent a danger

Conditions for safe storage, including any incompatibilities

Keep in original containers until product is used
 Store in a well-ventilated place.
 Product must be stored in a proper area and maintained at a temperature > 5 °C
 Skid must not be stacked more than two high

8 Exposure controls/personal protection

Control parameters

Phosphoric acid (7664-38-2)		
Quebec	VECD (mg / m ³)	3 mg / m ³
Quebec	VEMP (mg / m ³)	1 mg / m ³
Potassium hydroxyde		
Quebec	OEL Ceiling (mg / m ³)	2 mg / m ³
Canada (all other provinces)	OEL Ceiling (mg / m ³)	2 mg / m ³

Appropriate engineering controls

No special ventilation required if product is used properly
 Mix and use outside or in well ventilated areas

People that work around or with the product should wear the proper P.P.E.

Eye wash stations or eye wash showers should be available

Individual protection measures

- **EYE PROTECTION:** Employee should wear splash-proof or dust-resistant safety goggles to prevent eye contact with this substance.
- **EMERGENCY EYE WASH:** Where there is a possibility that eyes may be exposed to this substance; the employer should provide an eye wash fountain within the immediate work area for emergency use.
- **CLOTHING:** Employee should wear appropriate protective clothing and equipment to prevent repeated or prolonged skin contact with this substance.
- **GLOVES:** Employee should wear appropriate protective gloves to prevent contact with this substance.
- **VENTILATION:** Use only outside or in well ventilated areas
- **RESPIRATOR:** No special respiratory protection equipment is recommended under normal conditions of use. If circumstances warrant protection, an approved organic vapour respirator can be worn to reduce exposure to product vapours.

9 Physical and chemical properties

Physical and chemical properties

PHYSICAL STATE	Liquid
APPEARANCE AND ODOR	Clear or lightly tinted with a slight ammonia odor
BOILING POINT	>100 C ⁰
FREEZING POINT	<0 C ⁰
DENSITY	1.32 kg/L
PH	6.2 - 6.7
FLASH POINT	non flammable
FLAMMABILITY	not flammable
UPPER/LOWER FLAMMABILITY LIMITS	not applicable
VAPOUR DENSITY	no data available

SOLUBILITY IN WATER	Water soluble
PARTITION COEFFICIENT (N-OCTANOL/H₂O)	not available
AUTO IGNITION TEMPERATURE	no data available
DECOMPOSITION TEMPERATURE	no data available

10 Stability and reactivity

Reactivity

As such, not reactive under normal storage and handling conditions.

Chemical stability

Stable under normal storage, handling and mixing conditions

Possibility of hazardous reactions

None known under normal conditions of use

Conditions to avoid

Protect from freezing

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

No hazardous decomposition products kn

If heated to the point of decomposition - Carbon oxides, Sulphur oxides, Ammonia

11 Toxicological information

Toxicological (health) effects

Acute toxicity (oral) Oral - harmful if swallowed

Acute toxicity (dermal) Not classified

Acute toxicity (inhalation) Not classified

Information on the likely routes of exposure

Inhalation, Ingestion, Skin and eye contact

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms / effects: May cause cancer

Symptoms / effects after inhalation: May cause irritation of respiratory tract

Symptoms / effects after skin contact: May cause skin irritation

Symptoms / effects eye contact: May cause serious eye irritation

Symptoms / effects after ingestion: May cause serious health problems

Delayed and immediate effects and also chronic effects from short and long term exposure

Skin corrosion: Skin irritation

Eye irritation: Serious irritation

Sensitization: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT - single exposure: Not classified

STOT - repeated exposure: Not classified

Numerical measures of toxicity (such as acute toxicity estimates)

Ammonium polyphosphate (68333-79-9)	
LD 50 oral rat	> 2000 mg / kg
Potassium hydroxyde (1310-58-3)	
LD 50 oral rat	333 mg / kg

12 Ecological information

Toxicity

Ecology - general: Not tested for environmental effects

Acute aquatic toxicity: Not classified

Chronic aquatic toxicity: Not classified

Ammonium polyphosphate (68333-79-9)	
LC 50 fish 1	> 500 mg / kg (exposure 96 hr - Brachydanio rerio)
LC 50 fish 2	123 mg / kg (exposure 96 hr - Oncorhynchus mykiss)
Potassium hydroxide (1310-43-3)	
Log Pow	0.65
Cobalt sulfate (10124-43-3)	
Er 50 (algae)	>0.4 mg / L

Persistence and degradability

In agriculture, the use of this mixture in normal conditions is non persistent.

Bioaccumulative potential

Potassium hydroxide (1310-43-3)	
Log Pow	0.65

Mobility in soil

No specific data available for this mixture but agronomic knowledge confirms that:

the nitrogen (expressed as N) component of this mixture can be mobile in the soil;

the phosphorous (expressed as P₂O₅) component of this mixture is not mobile in the soil;

the potassium (expressed as K₂O) component of this mixture can be moderately mobile in the soil.

Other adverse effects

May release ammonium ions that are toxic to fish.

At extremely high concentrations, this may be hazardous to fish or other marine organisms.

13 Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible.

Triple rinse all containers and dispose in accordance with all regional / provincial / federal regulatory requirements or through the Clean Farms Empty Container Recycling Program

14 Transport information

UN Number

Not regulated

UN Proper Shipping Name

Not regulated

Transport hazard class(es)

Not regulated

15 Regulatory information

Safety, health and environmental regulations specific for the product in question

Potassium hydroxide (1310-43-3)
Listed on the Canadian DSL List

Ammonium polyphosphate (68333-79-9)
Listed on the Canadian DSL List

16 Other information

Other information

As per Workplace Health & Safety regulations in place, this SDS should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. The user must determine the appropriate measures that need to be implemented for the safe use and handling of this product in the context of the user's operations.

This safety data sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in this data sheet which we received from sources outside our company. We believe that information to be correct but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents. No warranty is made, either express or implied.