



Releaf Soybean

Section 1. Identification		
GHS product identifier	: Releaf Soybean	
Code	: Not available.	
Other means of identification	: Not available.	
Product type	: Liquid.	
Relevant identified uses o	f the substance or mixture and uses advised against	
Identified uses	: Liquid Fertilizer.	
Supplier/Manufacturer	: ATP Nutrition Ltd 190 Agri Park Road Oak Bluff, MB R4G 0A5 Tel: 204-287-2023 Fax: 204-487-0027 Email: info@atpnutrition.ca Web site: www.atpnutrition.ca	
Emergency telephone number (with hours of operation)	: For emergencies only. Call CHEMTREC: 1-800-424-9300 / +1 703-527-3887. (24/7)	

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: SKIN CORROSION/IRRITATION - Category 1B SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
GHS label elements	
Hazard pictograms	
	★ ★
Signal word	: Danger
Hazard statements	: H314 - Causes severe skin burns and eye damage.

H373 - May cause damage to organs through prolonged or repeated exposure. (brain)

Precautionary statements

Prevention

- : P280 Wear protective gloves, protective clothing and eye or face protection.
 - P260 Do not breathe vapor.
 - P264 Wash thoroughly after handling.





Section 2. Hazards identification

Response	 P304 + P340, P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. P363 - Wash contaminated clothing before reuse. P305 + P351 + P338, P310 - 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.
Storage	: P405 - Store locked up.
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

Ingredient name	%	CAS number
Phosphoric acid	15 - 40	7664-38-2
Manganese hydrogen phosphate	7 - 13	51349-94-1
Urea	3 - 7	57-13-6

United States: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

Canada: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with the amended HPR as of April 2018.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.
Inhalation	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.



Section 4. First aid measures

Skin contact	: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Most important sympton	<u>ns/effects, acute and delayed</u>
Potential acute health	effects
Evo contact	· Causes serious eve damage

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Eye contact	: Causes serious eye damage.	
Inhalation	: No known significant effects or critical hazards.	
Skin contact	: Causes severe burns.	
Ingestion	: No known significant effects or critical hazards.	
Over-exposure signs/symp	<u>ms</u>	
Eye contact	: Adverse symptoms may include the following: pain watering redness	
Inhalation	: No known significant effects or critical hazards.	
Skin contact	Adverse symptoms may include the following: pain or irritation redness blistering may occur	
Ingestion	Adverse symptoms may include the following: stomach pains	
Indication of immediate med	al attention and special treatment needed, if necessary	
Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delaye The exposed person may need to be kept under medical surveillance for 48 hours	
Specific treatments	: No specific treatment.	
Protection of first-aiders	. No action shall be taken involving any personal risk or without suitable training. If	it is

Protection of first-aiders
 No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)





Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: No specific fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides metal oxide/oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.





Releaf Soybean

Section 7. Handling and storage

Precautions for safe handling			
Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.	
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.	
Conditions for safe storage, including any incompatibilities	:	Do not store below the following temperature: 10°C (50°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.	

Section 8. Exposure controls/personal protection

Control parameters

United States

Occupational exposure limits

Ingredient name	Exposure limits
Phosphoric acid	ACGIH TLV (United States, 3/2019). TWA: 1 mg/m ³ 8 hours. STEL: 3 mg/m ³ 15 minutes. NIOSH REL (United States, 10/2016). TWA: 1 mg/m ³ 10 hours. STEL: 3 mg/m ³ 15 minutes. OSHA PEL (United States, 5/2018).
Manganese hydrogen phosphate	TWA: 1 mg/m ³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 1 mg/m ³ , (as Mn) 10 hours. Form: Fume STEL: 3 mg/m ³ , (as Mn) 15 minutes. Form: Fume ACGIH TLV (United States, 3/2019). TWA: 0.1 mg/m ³ , (as Mn) 8 hours. Form: Inhalable fraction TWA: 0.02 mg/m ³ , (as Mn) 8 hours. Form: Respirable fraction OSHA PEL (United States, 5/2018).
Urea	CEIL: 5 mg/m ³ , (as Mn) AIHA WEEL (United States, 7/2018). TWA: 10 mg/m ³ 8 hours.

Canada

Occupational exposure limits





Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
Phosphoric acid	CA Alberta Provincial (Canada, 6/2018). 15 min OEL: 3 mg/m ³ 15 minutes. 8 hrs OEL: 1 mg/m ³ 8 hours. CA British Columbia Provincial (Canada, 5/2019). TWA: 1 mg/m ³ 8 hours. STEL: 3 mg/m ³ 15 minutes. CA Ontario Provincial (Canada, 1/2018). TWA: 1 mg/m ³ 8 hours. STEL: 3 mg/m ³ 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWAEV: 1 mg/m ³ 8 hours. STEV: 3 mg/m ³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 3 mg/m ³ 15 minutes. TWA: 1 mg/m ³ 8 hours.
Manganese hydrogen phosphate	CA British Columbia Provincial (Canada, 5/2019). TWA: 0.02 mg/m ³ , (as Mn) 8 hours. Form: Respirable TWA: 0.2 mg/m ³ , (as Mn, Total) 8 hours. CA Quebec Provincial (Canada, 1/2014). TWAEV: 0.2 mg/m ³ , (as Mn) 8 hours. Form: Total dust CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 0.2 mg/m ³ , (as Mn) 8 hours. CA Ontario Provincial (Canada, 1/2018). TWA: 0.2 mg/m ³ , (as Mn) 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 0.6 mg/m ³ , (measured as Mn) 8 hours.
Urea	AIHA WEEL (United States, 7/2018). TWA: 10 mg/m ³ 8 hours.

Appropriate engineering controls	 If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.
Individual protection meas	<u>Ires</u>
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.



Section 8. Exposure controls/personal protection

Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	 Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Color	: Amber.
Odor	: Not available.
Odor threshold	: Not available.
рН	: 0.4 to 1
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Not available.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1.35
Solubility	: Soluble in water.
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.
Flow time (ISO 2431)	: Not available.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.



Section 10. Stability and reactivity

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials and alkalis.

Hazardous decomposition : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Urea	LD50 Oral	Rat	8471 mg/kg	-
Irritation/Corrosion		Ι		I
There is no data available.				
Sensitization				
There is no data available.				
<u>Mutagenicity</u>				
There is no data available.				
Carcinogenicity				
There is no data available.				
Reproductive toxicity				
There is no data available.				
Teratogenicity				
There is no data available.				
Specific target organ toxicit	t <u>y (single exposure)</u>			
There is no data available.				
Specific target organ toxicit	<u>ty (repeated exposure)</u>			

Name	Category	Target organs
Manganese hydrogen phosphate	Category 2	brain

Aspiration hazard

There is no data available.

Information on the likely routes of exposure	1	Dermal contact. Eye contact. Inhalation. Ingestion.
Potential acute health effects		
Eye contact	:	Causes serious eye damage.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	Causes severe burns.
Ingestion	1	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics				
Eye contact	: Adverse symptoms may include the following: pain watering redness			
Inhalation	: No known significant effects or critical hazards.			





Section 11. Toxicological information

	o	
Skin contact	Adverse symptoms may include the following: pain or irritation redness blistering may occur	
Ingestion	Adverse symptoms may include the following: stomach pains	
Delayed and immediate effect	and also chronic effects from short and long term exposure	
Short term exposure		
Potential immediate effects	No known significant effects or critical hazards.	
Potential delayed effects	No known significant effects or critical hazards.	
Long term exposure		
Potential immediate effects	No known significant effects or critical hazards.	
Potential delayed effects	No known significant effects or critical hazards.	
Potential chronic health eff	<u>s</u>	
General	May cause damage to organs through prolonged or repeated exposure	e.
Carcinogenicity	No known significant effects or critical hazards.	
Mutagenicity	No known significant effects or critical hazards.	
Teratogenicity	No known significant effects or critical hazards.	
Developmental effects	No known significant effects or critical hazards.	
Fertility effects	No known significant effects or critical hazards.	

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Urea	0	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
		1 1 5	48 hours 30 days

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Urea	<-1.73	-	low

Mobility in soil





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Section 12. Ecological information

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	ΙΑΤΑ
UN number	UN3264	UN3264	UN3264	UN3264
UN proper shipping name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid)			
Transport hazard class(es)	8	8	8	8
Packing group	II	11	П	11
Environmental hazards	No.	No.	No.	No.

DOT-RQ Details Additional information	:	Phosphoric acid	5000 lbs / 2270 kg [315.62 gal / 1194.7 L]
DOT Classification	:		8107.1 kg [1586.4 gal / 6005.3 L]. Package sizes product reportable quantity are not subject to the RQ requirements.
TDG Classification	:	Product classified as per the followi Goods Regulations: 2.40-2.42 (Class	ng sections of the Transportation of Dangerous ss 8).
IMDG	:	Emergency schedules F-A, S-B	
Special precautions for user	:		always transport in closed containers that are sons transporting the product know what to do in the



AERG : 154



Section 15. Regulatory information

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U.S. Federal regulations	: United States inventory (TSCA 8b): Not determined.	
	Clean Water Act (CWA) 307: Zinc disodium EDTA	
	Clean Water Act (CWA) 311: Phosphoric acid	
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Listed	
Clean Air Act Section 602 Class I Substances	: Not listed	
Clean Air Act Section 602 Class II Substances	: Not listed	
DEA List I Chemicals (Precursor Chemicals)	: Not listed	
DEA List II Chemicals (Essential Chemicals)	: Not listed	
SARA 302/304		
No products were found.		
SARA 304 RQ	: Not applicable.	
<u>SARA 311/312</u>		
Classification	: SKIN CORROSION/IRRITATION - Category 1B SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category	2
Composition/information	ingredients	

Name	Classification	
	SKIN CORROSION/IRRITATION - Category 1B SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1	
Manganese hydrogen phosphate	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	

SARA 313

	Product name	CAS number
Form R - Reporting requirements	Manganese hydrogen phosphate Zinc disodium EDTA	51349-94-1 14025-21-9
Supplier notification	Manganese hydrogen phosphate Zinc disodium EDTA	51349-94-1 14025-21-9

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts	: The following components are listed: Phosphoric acid
New York	: The following components are listed: Phosphoric acid
New Jersey	: The following components are listed: Phosphoric acid; Zinc disodium EDTA
Pennsylvania	: The following components are listed: Phosphoric acid; Manganese hydrogen phosphate; Zinc disodium EDTA

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

Canadian lists

Canada inventory (DSL : Not determined. NDSL)





Section 15. Regulatory information

Canadian NPRI

- : The following components are listed: Phosphoric acid; Manganese hydrogen phosphate; Zinc disodium EDTA
- **CEPA Toxic substances**

: None of the components are listed.

Section 16. Other information

Procedure used to derive the classification

	Justification	
SKIN CORROSION/IRRITATION - Category 1B SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2		Calculation method Calculation method Calculation method
History		· ·
Date of issue mm/dd/yyyy	: 05/30/2020	
Date of previous issue	: 10/15/2017	
Version	: 3	
Prepared by	: KMK Regulatory Services Inc.	
Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations 	

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.