SAFETY DATA SHEET

Ammonium Polyphosphate Solution 10-34-0

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier

Product name : Ammonium Polyphosphate Solution 10-34-0

Product code : 3284-27946, 3287-27946, 2517-27946

Product description : EC FERTILIZER NP Fertilizer Solution 10-34-0

Product type : Liquid.

Other means of identification : Not available.

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

Identified uses
Professional use in formulation of mixtures and end-use. Industrial use in the formulation of mixtures, intermediate use, and end use in industrial settings.

Uses advised against	Reason
Other	The supplier has no experience or data on this use.

1.3 Details of the supplier of the safety data sheet

Nutrien Europe SA
Avenue Louise 326/36
1050 Bruxelles
Belgium
Tel : +32 (0)2 646 70 00
Fax : +32 (0)2 646 68 60
commercial@nutrien.eu

e-mail address of person responsible for this SDS : productsafety@nutrien.com

1.4 Emergency telephone number

National advisory body/Poison Center

Telephone number : +43 1 406 43 43 (Austria - 24/7)
+32 70 245 245 (Belgium - 24/7)
+33 (0)1 45 42 59 59 (France - 24/7)
+31 (0)88 755 8000 (Netherlands - 24/7 Only for the purpose of informing medical personnel in case of acute intoxications)
+34 91 562 0420 (Spain - 24/7)
145 or +41 44 251 51 51 (Switzerland - 24/7)

Supplier

Telephone number : **CHEMTREC 24/7**
0800 293702 (Austria)
+32 2 808 32 37 (Belgium)
+33 9 75 18 14 07 (France)
0800 1817059 (Germany)
800 789 767 (Italy)
+48 22 398 80 29 (Poland)
+31 85 888 0596 (Netherlands)
+34 931 768 545 (Spain)
+41-435082011 (Switzerland)
+44 20 3807 3798 (United Kingdom)

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Acute Tox. 4, H302
Eye Irrit. 2, H319

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :

Signal word : Warning

Hazard statements : H302 - Harmful if swallowed.
H319 - Causes serious eye irritation.

Precautionary statements

Prevention : P280 - Wear eye or face protection.
P270 - Do not eat, drink or smoke when using this product.
P264 - Wash thoroughly after handling.

Response : P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical advice or attention.

Storage : Not applicable.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients : Ammonium polyphosphate

Supplemental label elements : Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
water	REACH #: Annex IV EC: 231-791-2 CAS: 7732-18-5 Index: 7732-18-5	>40 - <50	Not classified.	-	[2]
ammonium polyphosphate	REACH #: 01-2120090300-70 EC: 269-789-9 CAS: 68333-79-9	>30 - <40	Acute Tox. 4, H302 Eye Irrit. 2, H319	ATE [Oral] = 500 mg/kg	[1]
ammonium dihydrogenorthophosphate	REACH #: 01-2119488166-29 EC: 231-764-5 CAS: 7722-76-1	<10	Not classified.	-	[2]
diammonium hydrogenorthophosphate	EC: 231-987-8 CAS: 7783-28-0	<10	Not classified.	-	[2]
ammonium sulfate	EC: 231-984-1 CAS: 7783-20-2	<2	Not classified. **See Section 16 for the full text of the H statements declared above.**	-	[2]

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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Additional disclosure due to company policy

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : 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 occurs.

Inhalation : Remove person to fresh air and keep comfortable for breathing. If exposed person is not breathing, give artificial respiration or oxygen applied by trained personnel. Get medical attention if symptoms occur.

Skin contact : Rinse skin with water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : Causes serious eye irritation. Adverse symptoms may include the following: irritation, watering, redness, pain.

Inhalation : No known significant effects or critical hazards.

SECTION 4: First aid measures

Skin contact : No known significant effects or critical hazards.

Ingestion : Harmful if swallowed. Over-exposure by ingestion is unlikely under normal working conditions. Adverse symptoms may include the following: irritation, headache, drowsiness/fatigue, nausea or vomiting, stomach pains, diarrhea.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products : Decomposition products may include the following materials:
nitrogen oxides
sulfur oxides
phosphorus oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters : No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Contain and collect the water used to fight the fire for later treatment and disposal.

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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 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. Avoid breathing 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".

6.2 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 adverse impacts (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

SECTION 6: Accidental release measures

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop the release if safe to do so. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Use appropriate equipment to put the spilled substance in a container for reuse or disposal. Dispose of waste according to applicable legislation.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Avoid contact with eyes, skin and clothing. Do not ingest. Avoid breathing vapor or mist. 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container or corrosive-resistant and/or lined container. May be corrosive to metals. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Use appropriate containment to avoid environmental contamination. Incompatible with: aluminum, mild steel, copper, zinc and their alloys, including brass, bronze and galvanized materials.

7.3 Specific end use(s)

Recommendations : Fertilizer. Manufacture of specialty fertilizers.

Industrial sector specific solutions : Not applicable.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Biological exposure indices

None known.

SECTION 8: Exposure controls/personal protection

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
ammonium polyphosphate	DNEL	Long term Inhalation	18.06 mg/m³	Workers	Systemic
ammonium dihydrogenorthophosphate	DNEL	Long term Inhalation	5.9 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	8.3 mg/kg bw/day	Workers	Systemic
diammonium hydrogenorthophosphate	DNEL	Long term Inhalation	5.9 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	8.3 mg/kg bw/day	Workers	Systemic
ammonium sulfate	DNEL	Long term Inhalation	11.167 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	42.667 mg/kg bw/day	Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
diammonium hydrogenorthophosphate	Fresh water	1.7 mg/l	Assessment Factors

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Contact your personal protective equipment supplier to verify the compatibility of the equipment for the intended purpose.

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.

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.

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.

SECTION 8: Exposure controls/personal protection

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.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. [Clear to slightly hazy liquid.]

Color : Green. / Brown.

Odor : Ammoniacal. [Slight]

Odor threshold : Not available.

Melting point/freezing point : <-10°C

Initial boiling point and boiling range : Not available.

Flammability : Not applicable.

Lower and upper explosion limit : Not applicable.

Flash point : [Product does not sustain combustion.]

Auto-ignition temperature : Not applicable. Decomposes on heating.

Decomposition temperature : >150°C

pH : 6 to 7

Viscosity : Not available.

Solubility in water : Soluble in water in any proportion.

Partition coefficient: n-octanol/water : Not applicable.

Vapor pressure :

	Vapor Pressure at 20°C			Vapor pressure at 50°C		
Ingredient name	**mm Hg**	**kPa**	**Method**	**mm Hg**	**kPa**	**Method**
Water	23.8	3.2				

Relative density : Not available.

Density : 1.37 to 1.43 g/cm³ [20°C (68°F)]

Vapor density : Not available.

Explosive properties : Not available.

Oxidizing properties : Not available.

Particle characteristics

Median particle size : Not applicable.

SECTION 10: Stability and reactivity

10.1 Reactivity : Not considered to be reactive. Stable under recommended storage and handling conditions (see Section 7).

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : Keep away from heat and direct sunlight. Keep away from incompatible materials.

10.5 Incompatible materials : Aluminum, mild steel, copper, zinc and their alloys, including brass, bronze and galvanized materials. Contact your sales representative or a metallurgical specialist to ensure compatibility with your equipment.

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

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
water	LD50 Oral	Rat	>90 g/kg	-
ammonium dihydrogenorthophosphate	LC50 Inhalation Dusts and mists	Rat - Male, Female	>5 mg/l	4 hours
	LD50 Dermal	Rat - Male, Female	>5000 mg/kg	-
	LD50 Oral	Rat - Male, Female	>2000 mg/kg	-
diammonium hydrogenorthophosphate	LC50 Inhalation Dusts and mists	Rat - Male, Female	>5 mg/l	4 hours
	LD50 Dermal	Rat - Male, Female	>5000 mg/kg	-
	LD50 Oral	Rat - Male, Female	>2000 mg/kg	-
ammonium sulfate	LD50 Oral	Rat	2840 mg/kg	-

Conclusion/Summary : Harmful if swallowed.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Ammonium Polyphosphate Solution 10-34-0	1552.8	N/A	N/A	N/A	N/A
ammonium polyphosphate	500	N/A	N/A	N/A	N/A
ammonium sulfate	2840	N/A	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
diammonium hydrogenorthophosphate	Eyes - Cornea opacity	Rabbit	0	72 hours	-
	Skin - Edema	Rabbit	0	72 hours	-

Conclusion/Summary

Skin : Non-irritating to the skin.

Eyes : Causes serious eye irritation.

Respiratory : No known significant effects or critical hazards.

SECTION 11: Toxicological information

Sensitization

Product/ingredient name	Route of exposure	Species	Result
diammonium hydrogenorthophosphate	skin	Mouse	Not sensitizing

Conclusion/Summary

Skin : Non-sensitizer.

Respiratory : No known significant effects or critical hazards.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
ammonium dihydrogenorthophosphate	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative
diammonium hydrogenorthophosphate	471 Bacterial Reverse Mutation Test	Subject: Bacteria	Negative

Conclusion/Summary : No mutagenic effect.

Carcinogenicity

Conclusion/Summary : No known significant effects or critical hazards.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
ammonium dihydrogenorthophosphate	Negative	Negative	Negative	Rat - Male, Female	Oral: >1500 mg/kg	-
diammonium hydrogenorthophosphate	Negative	Negative	Negative	Rat - Male, Female	Oral: 1500 mg/kg	-

Conclusion/Summary : No known significant effects or critical hazards.

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
ammonium dihydrogenorthophosphate	Negative - Oral	Rat - Male, Female	>1500 mg/kg	-

Conclusion/Summary : No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Routes of entry anticipated: Dermal, Eyes.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

SECTION 11: Toxicological information

Eye contact : Causes serious eye irritation. Adverse symptoms may include the following: irritation, watering, redness, pain.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : Harmful if swallowed. Over-exposure by ingestion is unlikely under normal working conditions. Adverse symptoms may include the following: irritation, headache, drowsiness/fatigue, nausea or vomiting, stomach pains, diarrhea.

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

Short term exposure

Potential immediate effects : See above.

Potential delayed effects : See above.

Long term exposure

Potential immediate effects : See above.

Potential delayed effects : See below.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
ammonium dihydrogenorthophosphate	Chronic NOAEL Oral	Rat - Male, Female	250 mg/kg	-
diammonium hydrogenorthophosphate	Chronic NOAEL Oral	Rat - Male, Female	250 mg/kg	-

Conclusion/Summary : No known significant effects or critical hazards.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

No known significant effects or critical hazards.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
ammonium polyphosphate	Acute EC50 90890 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 >500 mg/l	Fish	96 hours
	Acute LC50 70000 µg/l Fresh water	Fish - Oncorhynchus tshawytscha - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
ammonium dihydrogenorthophosphate	Acute EC50 >97.1 mg/l	Aquatic plants	72 hours
	Acute LC50 1790 mg/l Fresh water	Daphnia	72 hours
	Acute LC50 >85.9 mg/l Fresh water	Fish	96 hours
diammonium hydrogenorthophosphate	Acute LC50 1700 mg/l Fresh water	Fish - Cirrhinus mrigala/L. Rohita - Fry	96 hours
	Acute LC50 26500 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
ammonium sulfate	Acute LC50 15 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Young	48 hours

SECTION 12: Ecological information

	Acute LC50 36700 µg/l Fresh water Chronic NOEC 143 µg/l Marine water	Fish - Oncorhynchus mykiss Fish - Salmo salar - Post-smolt	96 hours 5 weeks

Conclusion/Summary : Based on available data, the classification criteria are not met. May be harmful to the environment if released in large quantities. Excessive nutrient runoff to a body of water may result in eutrophication.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
water	-	-	Readily
ammonium polyphosphate	-	-	Readily
ammonium dihydrogenorthophosphate	-	-	Readily
diammonium hydrogenorthophosphate	-	-	Readily
ammonium sulfate	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
water	-1.38	-	low
ammonium dihydrogenorthophosphate	<1	-	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

No known significant effects or critical hazards.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times 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.

Hazardous waste : Yes.

SECTION 13: Disposal considerations

European waste catalogue (EWC)

Waste code	Waste designation
02 01 08*	agrochemical waste containing hazardous substances

Packaging

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied 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

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

SECTION 15: Regulatory information

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso III Directive.

National regulations

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.

Eurasian Economic Union : **Russian Federation inventory**: All components are listed or exempted.

Japan : **Japan inventory (CSCL)**: All components are listed or exempted.
Japan inventory (ISHL): Not determined.

New Zealand : All components are listed or exempted.

Philippines : All components are listed or exempted.

Republic of Korea : All components are listed or exempted.

Taiwan : All components are listed or exempted.

Thailand : All components are listed or exempted.

Turkey : Not determined.

United States : All components are active or exempted.

Viet Nam : All components are listed or exempted.

15.2 Chemical Safety Assessment : Chemical Safety Assessments for all substances in this product are either Complete or Not applicable.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Acute Tox. 4, H302	Calculation method
Eye Irrit. 2, H319	Calculation method

Full text of abbreviated H statements

H302	Harmful if swallowed.
H319	Causes serious eye irritation.

Full text of classifications [CLP/GHS]

Acute Tox. 4	ACUTE TOXICITY - Category 4
Eye Irrit. 2	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

Date of issue/ Date of revision : 3/23/2023

Date of previous issue : 3/22/2019

Version : 4

Notice to reader

Supply chain partners must ensure they pass this SDS, and all other relevant safety information to their customers.

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