Voluntarily compiled in accordance with REACH Regulation EC no 1907/2006, as amended, REACH Regulation UK SI 2019/758, as amended, and UK SI 2020/1577

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

1.1. Product identifier

Trade name	XTRA-FOL
Product code	PMCXTRA-FOL2XL

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

Identified use(s)	Fertiliser. Dilute for use as a professional and domestic fertiliser and biostimulant only.
Uses advised against	Do not use neat (undiluted). Not for human consumption.

1.3. Details of the supplier of the safety data sheet

UK Supplier

Supplier name:	Valagro UK Ltd
Supplier address:	P.O. Box 6027 Corby NN17 1ZH
Supplier telephone:	+44 (0) 8700 115117
Email:	sales.uk@valagro.co.uk

EU Supplier

Supplier name:	Valagro Spa
Supplier address:	Via Cagliari, 1 Zona Industriale 66041 Atessa (CH), Italy
Supplier telephone:	+39 08728811
Email:	regulatory@valagro.com

1.4. Emergency telephone number

NHS Direct; If there is a life-threatening emergency dial +44 999.
For less urgent health emergencies dial +44 111 (24-hour, English language, interpreters available).

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No.1272/2008 (CLP) Not classified for supply

2.2. Label elements

CLP Hazard Pictograms:	No applicable hazard pictogram
Signal Word(s):	No signal word
Hazard Statements:	Not classified for supply
Precautionary Statements:	Not classified for supply

2.3. Other hazards No other hazards identified

2.4. Additional Information Additional information is available in Section 16.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

EC Classification No 1272/2008

No hazardous materials are present at a concentration threshold that triggers a classification under this regulation.

This product contains seaweed extracts of species *Ascophyllum nodosum* processed from natural sources and nutrients from mineral sources.

Hazardous ingredient(s)	%w/w	CAS No. EC No. Index No.	REACH Registration No.	Hazard statements	ATE/ SCL/ M-Factor
Tetrapotassium pyrophosphate	>3 - <10	7320-34-5 230-785-7 -	01-2119489369-18	H319	-

SECTION 4: First aid measures

4.1. Description of first aid measures

4.1.1. First aid instructions.

If inhaled: Move person away from the source of exposure and into fresh air. If casualty is not breathing give artificial respiration and consult a physician immediately.

If on skin (or hair): Wash affected skin with plenty of water, remove any contaminated clothing and wash before reuse. Seek medical advice if any pain or irritation persists.

If in eyes: Immediately flush the eyes with plenty of water for up to fifteen minutes. Remove any contact lenses if possible and open eyes wide apart to wash. Seek medical attention if any pain persists.

If swallowed: Rinse out the mouth and give the casualty water to drink. Do not induce vomiting, but if vomiting occurs spontaneously keep the airways clear. Seek medical attention if feeling unwell or are concerned.

Other first aid advice: If vomiting occurs spontaneously, keep airways clear. Give more water when vomiting stops.

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

If inhaled: Inhalation of mist or vapours may cause some irritation of the nose and throat. Symptoms may include discomfort, coughing and shortness of breath.

If on skin (or hair): The product is not classified as irritating, however prolonged or repeated exposure may cause itching, redness, soreness or minor irritation.

If in eyes: The product is not classified as irritating to eyes, however some irritation of the eye tissues may occur together with some pain, redness and watering.

If swallowed: The product is not classified as toxic or harmful on ingestion, however vomiting, nausea and stomach pain are likely to occur if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

Medical treatment: No specific medical treatment is known. Treatment should be symptomatic.

SECTION 5: Firefighting measures

5.1. Extinguishing media

All extinguishing agents permitted.

5.2. Special hazards arising from the substance or mixture

Combustion products can include Oxides of carbon, nitrogen, sulphur, potassium, calcium, magnesium and phosphorus.

5.3. Advice for firefighters

Fight fire with normal precautions from a reasonable distance. The product may burn once heated to dryness.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

PPE for non-emergency personnel and emergency responders should include nitrile, latex or rubber gloves, tested to EN374 (EU). Do not wear open footwear, wear anti-slip footwear.

To control risks from accidental release use sand or other coarse absorbent to minimise slip hazards and absorb spilt material. No major hazards from uncontrolled releases are expected.

6.2. Environmental precautions

Avoid allowing significant quantities (litres) of neat product from entering drains, surface water, soil and open ground. Such release may cause eutrophication. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

Prevent significant quantities (tens of litres) of neat product from entering drains, surface water, soil and open ground. Collect spillage or absorb with a suitable absorbent material. Contain large spills with booms, spill mats and/ or drain protectors/ covers. Collect waste and seal securely.

Use a squeegee to contain and absorbent material to clean a spill as much as possible, the area should then be washed with water to remove remaining residues. Detergent and/ or alkaline cleaning agents may help remove staining and residues. Material that is not overly soiled should be assessed and considered for recycling and use.

6.4. Reference to other sections

See section 8.2 for personal protective equipment. See section 13.1 for disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Wash hands and exposed skin before breaks and after use. Wear rubber or nitrile gloves when handling the product for extended periods of time. No incompatible substances known. Do not discharge neat product into drains or water courses. Wash hands after use and before eating and drinking. Remove contaminated clothing and PPE before leaving the work are and entering eating spaces.

7.2. Conditions for safe storage, including any incompatibilities

This product is not known to be corrosive to plastic or metal containers. Keep only in original container. Protect from sunlight, store above 0ºC and below 30ºC. Stabilisers and antioxidants are not used in this product.

7.3. Specific end use(s)

Fertiliser. Dilute for use as a professional, home and garden fertiliser and biostimulant only. Use as a fertiliser at a professional/ consumer level using preparations of the substances Ascophyllum nodosum extract and assorted soluble salts.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limits known for product.

PNEC data for tetrapotassium pyrophosphate [CAS 7320-34-5] raw material.

Medium	(PNEC) µg/L
Freshwater	50
Marine water	5
Intermittent release	500
Sewage treatment plant	50 mg/L

PNEC data for Ascophyllum nodosum [CAS 84775-78-0] raw material.

Medium	(PNEC) µg/L
Freshwater	65.3
Marine water	6.53
Intermittent release	653
Soil (soil DW)	4.7
Sewage treatment plant	1 mg/L

8.2. Exposure controls

Use outdoors or in a well-ventilated area.

Personal Protection Equipment

Eye protection:	It is recommended that where this product is to be handling for an extended period safety glasses tested to EN166 (EU) should be worn.
Hand protection:	It is recommended that where this product is to be handled for an extended period; nitrile, latex or rubber gloves, tested to EN374 (EU) are worn.
Other skin protection	To avoid splashes to open skin keep covered when handling. Do not wear open footwear.
Respiratory protection	Respiratory equipment should not be necessary for normal product use or occupational handling.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Slightly viscous, opaque, brown liquid
Physical state:	Liquid
Colour:	Opaque brown
Odour:	Seaweed, slight ammoniacal
Odour threshold:	Data not available
pH:	9.0 – 9.5
Melting point:	Data not available
Freezing point:	Data not available
Initial boiling point:	>100ºC (for aqueous component)
Boiling range:	Data not available
Flash point:	>100ºC (for aqueous component)
Flash point method:	Data not available
Evaporation rate:	Data not available
Upper and lower flammability or explosive limits:	Data not available
Vapour pressure:	Data not available
Vapour density:	Data not available
Density:	1.20 – 1.25 g/ml at 20ºC
Solubility(ies)	Miscible in water
Partition coefficient: n-octanol/water	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	Data not available
Viscosity	Not measured, more viscous than water.
Explosive properties	Not expected to be explosive, no explosive components
Oxidising properties	Not expected to be oxidising, no oxidising components
9.2. Other information	No other information available

SECTION 10: Stability and reactivity

10.1. Reactivity The product is stable and does not decompose under normal use and storage conditions. The product may eventually be susceptible to bacteriological attack once opened.

10.2. Chemical stability Stable under normal storage conditions.

10.3. Possibility of hazardous reactions Product not known to react and/or polymerise in a hazardous way.

10.4. Conditions to avoid Excessive heat (to water boiling point). Avoid mixing with strongly acidic solutions, this will lead to precipitation. Avoid mixing with strongly basic solutions, this will lead to precipitation and ammonia release.

10.5. Incompatible materials Strong oxidising agents, acids or bases.

10.6. Hazardous decomposition products No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity — Data available for tetrapotassium pyrophosphate component.
LD50, Oral, Rat; >2,000 mg/kg BW
LD50, Dermal, Rabbit; >2,000 mg/kg BW

Skin corrosion/irritation — Data available for Ascophyllum nodosum component.
Not irritant (rabbit, OECD 404)

Serious eye damage/irritation — Data available for Ascophyllum nodosum component.
Mild irritant (rabbit, OECD 405)

Respiratory or skin sensitisation — Data not available

Germ cell mutagenicity — Data not available

Carcinogenicity — Data not available

Reproductive toxicity — Data not available

STOT-repeated exposure; — Data not available

11.2. Other information No other information

SECTION 12: Ecological information

12.1. Toxicity

No specific data for product.

Data for Ascophyllum nodosum component (dilution scaling applied).

Species	Test	Value
Zebrafish (*Danio rerio*)	96H LC50	>100 mg/L
Water flea (*Daphnia magna*)	48H EC50	>100 mg/L
Algae (*Pseudokirchnerella subcapitata*)	72H EyC10	>100 mg/L

Data for tetrapotassium pyrophosphate component (dilution scaling applied).

Species	Test	Value
Rainbow trout (*Oncorrhynchus mykiss*)	96H LC50	>100 mg/L
Water flea (*Daphnia magna*)	48H EC50	>100 mg/L
Algae (*Desmodesmus subspicatus*)	72H EC50	>100 mg/L

12.2. Persistence and degradability

The *A. nodosum* extract is readily biodegradable. The active component of the product achieves >60% bio-degradation after 17 days.

12.3. Bioaccumulative potential

The seaweed extract active has a logKow of < -3.3. A low potential for bio-accumulation and bio-concentration is expected.

12.4. Mobility in soil

The product is miscible in water, therefore it is not expected to adsorb into sediment.

12.5. Results of PBT and vPvB assessment

The *A. nodosum* extract is neither a PBT nor a vBvP substance.

12.6. Other adverse effects

Phosphates are plant nutrients and as such may contribute to the growth of phytoplankton in water.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste containers to be used for product include IBCs or steel/ plastic drums. This material, if discarded as produced, is not classified as a hazardous waste. Recycle the product where possible. Small quantities (a few litres) of dilute washings are eligible for disposal down domestic drains.

No specific waste treatment containers to be used for contaminated packaging, packaging should be recycled where possible. Waste treatment method for contaminated packaging should include a rinse with water, this effluent is eligible for disposal down domestic drains.

SECTION 14: Transport information

14.1. UN number

Not applicable

14.2. UN proper shipping name

ADR/RID Not dangerous goods
IMDG Not dangerous goods
IATA Not dangerous goods

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

No specific applicable regulation known.

A chemical safety assessment has not been carried out for this product

SECTION 16: Other information

a) Changes made to SDS:

Section 1; Valagro address added, emergency number information updated.
Section 2; Additional clarity on PBT, vBvP information.
Section 3; Additional clarity on components.
Section 4; Text amended, overall message unchanged.
Section 5; Slight rewording and condensing.
Section 6; Slight rewording, cleaning advice included.
Section 7; Slight rewording, storage advice amended.
Section 8; PPE recommendations amended.
Section 9; Physical properties amended.
Section 10; Additional reference to bacterial attack included.
Section 11; Data added.
Section 12; Data sources changed, degradability and other adverse effects added.
Section 13; Message simplified, disposal options made clearer.
Section 14; No changes.
Section 15; Condensing.

b) Key (or legend)

DNEL	Derived No Effect Concentration
PNEC	Predicted no effect Concentration
DW	Dry Weight
LD50	Lethal Dosage affecting 50% of sample population
LC50	Lethal Concentration affecting 50% of sample population
EC50	Effective Concentration affecting 50% of sample population
BW	Body Weight
OECD	Organisation for Economic Co-operation and Development

c) Literature references

Data gathered for raw materials from European Chemicals Agency:

hiip://echa.europa.eu/web/guest/informat ion-on-chemicals/registered-substances
Last accessed (16/07/2021)
Some physical properties reported from direct laboratory testing performed at Grotech Production Ltd.
Some properties gathered from supplier SDS of constituent components.

d) Details of relevant hazard information

H319 Causes serious eye irritation

e) Appropriate training for workers

Training for spillage and chemical handling is recommended.

f) Classification method:

Classification on basis of components.