

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

1.1. Product identifier

Product name: CLIPLESS

Synonyms: TRINEXAPAC-ETHYL 120G/L ME

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

Use of substance / mixture: Plant growth regulator

1.3. Details of the supplier of the safety data sheet

Company name: Headland Agrochemicals

Rectors Lane

Pentre

Deeside

Flintshire

CH5 2DH

United Kingdom

Tel: +44(0)1244 537370

Fax: +44(0)1244 532097

Email: enquiry@headlandgroup.com

1.4. Emergency telephone number

Emergency tel: +44(0)1244 537370

(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CHIP: N: R51; -: R53

Most important adverse effects: Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Label elements under CHIP:

Hazard symbols: Dangerous for the environment.



Risk phrases: R51: Toxic to aquatic organisms.

R53: May cause long-term adverse effects in the aquatic environment.

Safety phrases: S57: Use appropriate container to avoid environmental contamination.

SAFETY DATA SHEET

CLIPLESS

Page: 2

Precautionary phrases: To avoid risks to man and the environment, comply with the instructions of use.

2.3. Other hazards

PBT: This substance is not identified as a PBT substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

TETRAHYDRO-2-FURYL METHANOL

EINECS	CAS	CHIP Classification	CLP Classification	Percent
202-625-6	97-99-4	Xi: R36	-	>60%

TRINEXAPAC-ETHYL

-	95266-40-3	-: R52/53	-	10-30%
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POLYARYL ETHOXYLATE

-	-	Xi: R36; N: R51/53	-	10-30%
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Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.

Eye contact: Remove affected person immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids.

Ingestion: Do not induce vomiting. Drink several glasses of water or milk. If vomiting occurs, rinse mouth and drink fluids again. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Get medical attention if any discomfort continues.

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

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: No symptoms.

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

Immediate / special treatment: There is no specific antidote against this substance. After decontamination, treatment is supportive and symptomatic. Gastric lavage and/or administration of activated charcoal can be considered.

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SAFETY DATA SHEET

CLIPLESS

Page: 3

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Dry chemical powder. Carbon dioxide. Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. Turn leaking containers leak-side up to prevent the escape of liquid. Mark out the contaminated area with signs and prevent access to unauthorised personnel.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Spills on the floor or other impervious surface should be absorbed onto an absorptive material such as hydrated lime, universal binder, Fuller's earth or other absorbent clays. Collect the contaminated absorbent in suitable containers. Rinse the area with water and industrial detergent. Absorb wash liquid onto absorbent and transfer to suitable containers. Wash waters must be prevented from entering surface water drains. Large spills which soak into the ground should be dug up and placed in suitable containers. Spills in water should be contained as much as possible by isolation of the contaminated water. The contaminated water must be collected and removed for treatment or disposal. Uncontrolled discharge into water courses must be alerted to the appropriate regulatory body.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid contact with eyes, skin or clothing. Avoid breathing vapour or spray mist. Wash thoroughly after handling. Remove contaminated clothing immediately. Then wash thoroughly and put on clean clothes. For its use as a plant growth regulator, first look for precautions and personal protection measures on the officially approved label on the

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SAFETY DATA SHEET

CLIPLESS

Page: 4

packaging or for other official guidance or policy in force. If these are lacking, see section 8. The precautions of section 8 are primarily meant for handling of the undiluted product and for preparing the spray solution, but can be recommended for spraying as well.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed. The floor of the storage room must be impermeable to prevent the escape of liquids. The room should only be used for storage of chemicals, and without access to unauthorised persons or children. Food, drink, feed and seed should not be present. A hand wash station should be available.

7.3. Specific end use(s)

Specific end use(s): The product is a plant growth regulator which may only be used for officially allowed applications in accordance with a label approved by the regulatory authorities.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: Not applicable.

8.2. Exposure controls

Engineering measures: When used in a closed system, personal protection equipment will not be required. The following is meant for other situations, when the use of a closed system is not possible, or when it is necessary to open the system. Consider the need to render equipment or piping system non-hazardous before opening.

Respiratory protection: The product is not likely to present an airborne exposure concern during normal handling, but in the event of a discharge of the material which produces a heavy vapour or mist, workers should put on officially approved face mask or respiratory protection. Respiratory protective device with particle filter.

Hand protection: Wear natural rubber gloves if much manual labour with the substance is required. The breakthrough time of this material for the product is unknown, but it is expected that it will give adequate protection.

Eye protection: Safety glasses. Safety goggles. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Environmental: Do not discharge to the environment.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Red-brown

Odour: Glue like

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: The product can be emulsified in water.

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SAFETY DATA SHEET

CLIPLESS

Page: 5

Viscosity: 18 cP at 20°C, 8 cP @ 40°C

Melting point/range°C: Not available

Flash point°C: 72

Autoflammability°C: 268

Relative density: 1.08g/ml@20°C

pH: 3.6 (1% in water)

9.2. Other information

Other information: Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.
Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: No data available.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

Route	Species	Test	Value	Units
ORAL	RAT	LD50	>2000	mg/kg
DERMAL	RAT	LD50	>2000	mg/kg
VAPOURS	RAT	4H LC50	>5.33	mg/l

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: No symptoms.

Other information: The product should be handled with the usual care when dealing with chemicals.

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SAFETY DATA SHEET

CLIPLESS

Page: 6

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
RAINBOW TROUT (<i>Oncorhynchus mykiss</i>)	96H LC50	34.1	mg/l
Daphnia magna	48H EC50	>100	mg/l
ALGAE	72H IC50	21.1	mg/l
DUCKWEED (<i>Lemna gibba</i>)	7day EC50	14.9	mg/l
EARTHWORMS(<i>Eisenia fetida</i>)	14day LC50	>1000	mg/kg dry soil
INSECTS (Honey bees)	48h LD50 contact	>1800	µg/bee
INSECTS (Honey bees)	48h LD50 oral	>234	µg/bee

12.2. Persistence and degradability

Persistence and degradability: Trinexapac-ethyl does not fulfil the criteria for being readily biodegradable, but it is degraded in the environment. Half-life times are usually less than 1 day in soil. Degradation products are further degraded, but slower. Degradation occurs mainly microbiologically.

12.3. Bioaccumulative potential

Bioaccumulative potential: Due to its relatively high solubility in water and degradability, trinexapac-ethyl does not bioaccumulate.

12.4. Mobility in soil

Mobility: Under normal conditions trinexapac-ethyl is moderately mobile in soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This substance is not identified as a PBT substance.

12.6. Other adverse effects

Other adverse effects: Trinexapac-ethyl has growth inhibiting effects on many plants. It is considered as non-toxic to fish, aquatic invertebrates, birds, mammals, insects and soil micro- and macro-organisms.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Waste that cannot be reused or chemically reprocessed can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing.

Disposal of packaging: Triple rinse (or equivalent) and offer for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill.

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SAFETY DATA SHEET

CLIPLESS

Page: 7

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

Specific regulations: All ingredients in this product are covered by EU chemical legislation.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

Phrases used in s.2 and 3: R36: Irritating to eyes.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R51: Toxic to aquatic organisms.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R53: May cause long-term adverse effects in the aquatic environment.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.