

**Section 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product name: RELAY TURF ELITE

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

Use of substance / mixture: Can be used as herbicide only.

**1.3. Details of the supplier of the safety data sheet**

Company name: Headland Agrochemicals

Rectors Lane

Pentre

Flintshire

CH5 2DH

United Kingdom

Tel: +44(0)1244 537370

Fax: +44(0)1244 532097

Email: [enquiry@headlandgroup.com](mailto: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 CLP: Eye Dam. 1: H318; Aquatic Chronic 2: H411; -: EUH401

**Most important adverse effects:** Causes serious eye damage. Toxic to aquatic life with long lasting effects. To avoid risks to human health and the environment, comply with the instructions for use.**2.2. Label elements**

Label elements:

**Hazard statements:** H318: Causes serious eye damage.

H411: Toxic to aquatic life with long lasting effects.

EUH401: To avoid risks to human health and the environment, comply with the instructions for use.

**Signal words:** Danger**Hazard pictograms:** GHS05: Corrosion

GHS09: Environmental



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**Precautionary statements:** P273: Avoid release to the environment.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310: Immediately call a POISON CENTER/doctor/physician.  
P501: Dispose of contents/container to hazardous or special waste collection point.

## 2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous ingredients:

##### MCPA, POTASSIUM SALT

EINECS	CAS	PBT / WEL	CLP Classification	Percent
226-015-4	5221-16-9	-	Acute Tox. 4: H302+312+332; Aquatic Acute 1: H400; Aquatic Chronic 1: H410	10-30%

##### MECOPROP-P, POTASSIUM SALT

-	66423-05-0	-	Acute Tox. 4: H302; Eye Dam. 1: H318; Aquatic Chronic 2: H411	1-10%
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##### DICAMBA, POTASSIUM SALT

233-002-7	10007-85-9	-	Eye Irrit. 2: H319; Aquatic Chronic 3: H412	1-10%
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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. Consult a doctor if irritation develops.

**Eye contact:** Bathe the eye with running water for 15 minutes. Remove contact lenses, if present, after the first few minutes, then continue rinsing. Transfer to hospital for specialist examination.

**Ingestion:** Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Seek medical attention if any symptoms develop.

**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 pain and redness. The eyes may water profusely. May cause permanent damage.

[cont...]

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**Ingestion:** There may be soreness and redness of the mouth and throat.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

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

**Immediate / special treatment:** Show this safety data sheet to the doctor in attendance. Initial treatment should be symptomatic.

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Water. Carbon dioxide. Alcohol resistant foam. Dry chemical powder. Use water spray to cool containers. Do not use high volume water jet.

### 5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** In combustion emits toxic fumes. In the event of fire (HCL, CL2, NOx, CO) may be formed.

### 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. Contaminated fire extinguishing water should not be discharged into drains, if preventable.

## 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. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. In the case of large spills (1 ton or more), alert the appropriate authorities.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding. Accidental release into water courses must be alerted to the appropriate regulatory body.

### 6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Surface water drains within close vicinity of the spill should be covered. Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Refer to section 13 of SDS for suitable method of disposal.

### 6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of SDS. Refer to section 13 of SDS.

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## Section 7: Handling and storage

### 7.1. Precautions for safe handling

**Handling requirements:** Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Store in a cool, well ventilated area. Keep container tightly closed. Keep out of the reach of children. Keep away from food, drink and animal feedstuffs.

**Suitable packaging:** Must only be kept in original packaging.

### 7.3. Specific end use(s)

**Specific end use(s):** This product is a registered pesticide, which may only be used for the applications it is registered for, in accordance with a label approved by the regulatory authorities.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Workplace exposure limits:** No data available.

### DNEL/PNEC Values

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area.

**Respiratory protection:** In the event of a discharge of the material which produces a heavy vapour or mist, workers must put on officially approved respiratory protection equipment with a universal filter type including particle filter.

**Hand protection:** PVC gloves. Nitrile gloves.

**Eye protection:** Tightly fitting safety goggles. Ensure eye bath is to hand.

**Skin protection:** Protective clothing.

**Environmental:** Refer to specific Member State legislation for requirements under Community environmental legislation.

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**State:** Liquid

**Colour:** Brown

**Odour:** Phenolic

**Solubility in water:** Miscible in all proportions

**Viscosity:** 4.5 mPa.s at 20°C

**Flash point°C:** >100

**Vapour pressure:** See section 9.2

**pH:** 6.5 - 7.5

**Part.coeff. n-octanol/water:** See section 12.3

**Relative density:** 1.16 g/cm<sup>3</sup> (20°C)

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## 9.2. Other information

Other information: Vapour pressure: MCPA - 0.4 mPa at 32°C; Mecoprop-P - 0.4 mPa at 20°C; Dicamba - 1.7 mPa at 25°C. Surface tension: 50.7 mN/m at 20°C

## 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: Acids.

### 10.6. Hazardous decomposition products

Haz. decomp. products: See subsection 5.2.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

Hazardous ingredients:

#### MCPA, POTASSIUM SALT

DERMAL	RAT	LD50	>4000	mg/kg
INHALATION	RAT	4H LC50	6.36	mg/l
ORAL	RAT	LD50	962	mg/kg

#### MECOPROP-P, POTASSIUM SALT

DERMAL	RAT	LD50	>4000	mg/kg
INHALATION	RAT	4H LC50	>5.6	mg/l
ORAL	RAT	LD50	431	mg/kg

#### DICAMBA, POTASSIUM SALT

DERMAL	RABBIT	LD50	>2000	mg/kg
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INHALATION	RAT	4H LC50	>9.6	mg/l
ORAL	RAT	LD50	1707	mg/kg

## Relevant hazards for substance:

Hazard	Route	Basis
Serious eye damage/irritation	OPT	Hazardous: calculated

## Symptoms / routes of exposure

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

**Eye contact:** There may be pain and redness. The eyes may water profusely. May cause permanent damage.

**Ingestion:** There may be soreness and redness of the mouth and throat.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

## Section 12: Ecological information

### 12.1. Toxicity

#### Hazardous ingredients:

##### MCPA, POTASSIUM SALT

ALGAE ( <i>Raphidocelis subcapitata</i> )	72H ErC50	79.8	mg/l
BEE	48H LD50 (oral)	>200	µg/bee
BIRD ( <i>Colinus virginianus</i> )	LD50	234	mg/kg
DAPHNID ( <i>Daphnia magna</i> )	48H EC50	>190	mg/l
DUCKWEED ( <i>Lemna gibba</i> )	7d EbC50	0.152	mg/l
RAINBOW TROUT ( <i>Oncorhynchus mykiss</i> )	96H LC50	50	mg/l
WORM ( <i>Eisenia foetida</i> )	14d LC50	325	mg/kg

##### MECOPROP-P, POTASSIUM SALT

ALGAE	72H ErC50	16.2	mg/l
BEE	48H LD50 (oral)	>100	µg/bee
BIRD	LD50	497	mg/kg
DAPHNID ( <i>Daphnia magna</i> )	48H EC50	>91	mg/l
DUCKWEED ( <i>Lemna gibba</i> )	7d EbC50	1.6	mg/l
RAINBOW TROUT ( <i>Oncorhynchus mykiss</i> )	96H LC50	>100	mg/l
WORM	14d LC50	>988	mg/kg

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### DICAMBA, POTASSIUM SALT

ALGAE	96H NOErC	25	mg/l
ALGAE ( <i>Skeletonema costatum</i> )	72H EbC50	1.8	mg/l
BEE	48H LD50 (contact)	>100	µg/bee
BEE	48H LD50 (oral)	>100	µg/bee
BIRD ( <i>Anas platyrhynchos</i> )	LD50	1373	mg/kg
DAPHNID ( <i>Daphnia magna</i> )	48H EC50	110	mg/l
DUCKWEED ( <i>Lemna minor</i> )	7d EbC50	0.45	mg/l
RAINBOW TROUT ( <i>Oncorhynchus mykiss</i> )	96H LC50	>100	mg/l
WORM ( <i>Eisenia foetida</i> )	14d LC50	>1000	mg/kg

#### 12.2. Persistence and degradability

**Persistence and degradability:** Mecoprop-P: DT50(soil) = 6.3 - 8.2 days. Dicamba: DT50(soil) = 2.1 - 8.0 days. MCPA: DT50(soil) = 7.0 - 14.0 days

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** MCPA: Log Kow = 0.71. Mecoprop-P: Log Kow = 2.8. Dicamba: Log Kow = 1.88.

#### 12.4. Mobility in soil

**Mobility:** Mecoprop-P: Koc = 20 - 43 (pH 5.6 - 7.6); 135 - 167 (pH 4.3 - 4.4). Dicamba: Kfoc = 3.45 - 21.2; 1/n = 0.72 - 0.93. MCPA: Koc = 10 - 157.

#### 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

#### 12.6. Other adverse effects

**Other adverse effects:** No data available.

### Section 13: Disposal considerations

#### 13.1. Waste treatment methods

**Disposal operations:** In accordance with local and national regulations. Dispose of product and packaging in accordance with The Green Code (the Code of Practice for the safe use of pesticides on farms and holdings), a MAFF publication.

**Waste code number:** 02 01 08

**Disposal of packaging:** Do not re-use empty containers. Dispose of as unused product. Dispose empty and triple rinsed container within a local disposing system according to EC directive 94/62/EC.

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

### Section 14: Transport information

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### 14.1. UN number

UN number: N/A

### 14.2. UN proper shipping name

Shipping name: NOT CLASSIFIED AS DANGEROUS IN THE MEANING OF TRANSPORT REGULATIONS.

### 14.3. Transport hazard class(es)

Transport class: N/A

### 14.4. Packing group

Packing group: N/A

### 14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

### 14.6. Special precautions for user

Special precautions: No special precautions.

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

Transport in bulk: The product is not transported in bulk tankers.

## Section 15: Regulatory information

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

Specific regulations: Product Registration Number: MAPP 17192.

### 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.

\* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: EUH401: To avoid risks to human health and the environment, comply with the instructions for use.

H302: Harmful if swallowed.

H302+312+332: Harmful if swallowed, in contact with skin or if inhaled.

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

H411: Toxic to aquatic life with long lasting effects.

H412: Harmful to aquatic life with long lasting effects.

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**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.