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

1.1. Product identifier

Product name: RELAY TURF
Product code: 10234

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

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: * Xn: R22; Xi: R41; N: R51/53
Classification under CLP: * Acute Tox. 4: H302; Eye Dam. 1: H318; Aquatic Chronic 2: H411; :: EUH401
Most important adverse effects: Harmful if swallowed. Risk of serious damage to eyes. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Label elements under CLP:

Hazard statements: * H302: Harmful if swallowed.
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

[cont...]
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Hazard pictograms: * GHS05: Corrosion
GHS07: Exclamation mark
GHS09: Environmental

Precautionary statements: * P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+312: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P330: Rinse mouth.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501: Dispose of contents/container to hazardous or special waste collection point.

Label elements under CHIP:

Hazard symbols: * Harmful.
Dangerous for the environment.

Risk phrases: * R22: Harmful if swallowed.
R41: Risk of serious damage to eyes.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases: * S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S35: This material and its container must be disposed of in a safe way.
S39: Wear eye / face protection.
S46: If swallowed, seek medical advice immediately and show this container or label.
S57: Use appropriate container to avoid environmental contamination.

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

2.3. Other hazards

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

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:
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.
Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor if irritation develops.

Eye contact: Bathe the eye with running water for 15 minutes. 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. 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 pain and redness. The eyes may water profusely. The vision may become blurred. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

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: Not applicable.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: * Carbon dioxide. Water spray. 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 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 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: * Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Rinse the area with water and industrial detergent. Absorb wash liquid onto absorbent and transfer to suitable containers. 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.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: * Avoid direct contact with the substance. Material should be handled by mechanical means as much as possible. Ensure there is sufficient ventilation of the area. Exhaust gases should be filtered or treated otherwise. For use as a plant growth regulator, look for precautions and personal protection measures on the officially approved label or other official guidance or policy in force. If these are lacking, see section 8. Clean protective clothing and protective equipment with soap and water after use. Collect all wash water and dispose of as hazardous waste.

7.2. Conditions for safe storage, including any incompatibilities

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

8.1. DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

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

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 protection with universal filter type, including particle filter.


Eye protection: 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

Flash point°C: >100

Relative density: 1.204 g/cm³ at 20°C

pH: 9.9

9.2. Other information

Other information: Surface tension: 49.8 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. Direct sunlight.

10.5. Incompatible materials

Materials to avoid: * Strong acids. Strong bases.

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 (ISO)

<table>
<thead>
<tr>
<th>Effect</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal</td>
<td>Rat</td>
<td>LD50 &gt;4000 mg/kg</td>
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<tr>
<td>Dust/Mist</td>
<td>Rat</td>
<td>4H LC50 &gt;6.36 mg/l</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>LD50 962 mg/kg</td>
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MECOPROP-P

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<td>Dermal</td>
<td>Rat</td>
<td>LD50 &gt;4000 mg/kg</td>
</tr>
<tr>
<td>Dust/Mist</td>
<td>Rat</td>
<td>4H LC50 &gt;5.6 mg/l</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>LD50 431 - 1050 mg/kg</td>
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</table>

DICAMBA (ISO)

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<td>Rat</td>
<td>LD50 &gt;2000 mg/kg</td>
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<tr>
<td>Dust/Mist</td>
<td>Rat</td>
<td>4H LC50 4.46 mg/l</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>LD50 1581 mg/kg</td>
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Relevant effects for mixture:

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</thead>
<tbody>
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<td>Acute toxicity (harmful)</td>
<td>ING</td>
<td>Hazardous: calculated</td>
</tr>
<tr>
<td>Irritation</td>
<td>OPT</td>
<td>Hazardous: calculated</td>
</tr>
</tbody>
</table>

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. The vision may become blurred. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

[cont...]
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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

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: * MCPA: DT50(soil) = 24 days; DT50(water) = 13.5 days Mecoprop-P: DT50(soil) = 8.2 days. Dicamba: DT50(soil) = 4 days.

12.3. Bioaccumulative potential

Bioaccumulative potential: Not expected to bioaccumulate.

12.4. Mobility in soil

Mobility: * MCPA: Koc = 10 - 157. 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.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

Other adverse effects: Toxic to aquatic organisms.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: * 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.

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

Section 14: Transport information

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: Yes  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 10278.

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: 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 3:

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

H302: Harmful if swallowed.

H315: Causes skin irritation.

H318: Causes serious eye damage.

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.

R22: Harmful if swallowed.

R38: Irritating to skin.

R41: Risk of serious damage to eyes.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

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

[cont...]
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.