

BROADLEAF WEEDS CONTROLLED:

Botanical name	Common name	Vernacular name (shona/Ndebele)
<i>Amaranthus hybridus</i>	Pigweed	Bonongwe/Imbuya
<i>Bidens pilosa</i>	Blackjack	Tsine, Muuwu/Ucucuza
<i>Chenopodium album</i>	Fathen	Kasunika
<i>Conyza albida</i>	Fleabane	Gonzo
<i>Galinsoga parviflora</i>	Gallant soldier	Chaarendo
<i>Nicandra physalodes</i>	Apple of Peru	Gumachembere
<i>Oxalis latifolia</i>	Purple garden sorrel	Chimunya, umungumungwana
<i>Physalis angulata</i>	Wild gooseberry	Muguzubheri/Maguzubeli
<i>Portulaca oleracea</i>	Purslane	Chifandichimuka
<i>Schkuhria pinnata</i>	Dwarf marigold	Rukarwa
<i>Sonchus oleraceus</i>	Sowthistle	Rurimirwemombe, ulimiwenkhomo
<i>Tagetes minuta</i>	Mexican marigold	Kambanje, Mbanda/Imbanje-yonxiwa

NOTE:

Resolve controls the above-mentioned weed species. Other weed species that were not present in the trials, during the development of the product may possibly also be controlled to a certain degree. The registration holder however, does not accept any responsibility for unlisted weeds.

Weeds not yet emerged or weeds larger than the 6-leaf growth stage at the time of application will not be controlled.

Bayer

resolve[®]
with photo-X[®] technology

For further information - lift
this page for full details



Reg. No. 14-C-65-18-C-159-1

**TO CAUSE A HAZARD IN THE USE, STORAGE OR DISPOSAL OF THIS
SUBSTANCE IS AN OFFENCE.**

PRECAUTIONS:

1. Handle with care and avoid any skin contact. Poisonous by swallowing or inhalation.
2. **DO NOT** eat, drink or smoke while mixing, applying, handling or before washing hands and face.
3. Slightly irritating to skin and eyes.
4. **WEAR PROTECTIVE CLOTHING**, i.e. overalls, rubber gloves, and rubber boots and a facemask while mixing, spraying and cleaning up.
5. **DO NOT** inhale fumes or spray mist.
6. Avoid spray drift onto other crops, grazing, rivers and dams.
7. Remove protective clothing on completion of spraying. Wash skin thoroughly with soap and water and dress in clean clothing and wash contaminated clothing daily.
8. Clean applicator after use, dispose of wash water where it will not contaminate crops, grazing, rivers and dams.
9. **KEEP APART FROM FOOD AND FEEDSTUFFS**
10. **KEEP OUT OF REACH OF CHILDREN, UNINFORMED PERSONS AND ANIMALS.**
11. **STORE IN A COOL, DRY PLACE IN ORIGINAL CONTAINER AND KEEP UNDER LOCK AND KEY.**
12. **TOXIC TO FISH AND WILD LIFE. DO NOT** CONTAMINATE DRINKING POOLS, DAMS, RIVERS AND WATERWAYS
13. **GRAZING OR FEEDING: ALLOW A 28 DAY WITHHOLDING PERIOD BETWEEN APPLICATION AND GRAZING OR FEEDING.**
14. **SPILLAGE** – Use protective clothing when dealing with spillages. Prevent entry into drains, water or soil. Soak up spilled product with absorbent material such as dry soil, sawdust or sand and place into a labeled closable container for safe disposal. Use damp cloth to clean the floor and contaminated parts. Place used cleaning materials into closable container for safe disposal.
15. **CONTAINER DISPOSAL** – Triple-rinse container emptying washings into spray tank and spray onto crop. Perforate and flatten rinsed container to make it unsuitable for further use or burn it and bury crushed container or ashes in a recommended disposal pit in a secure location away from water sources or arable land. **DO NOT** use empty container for any other purpose.

SYMPTOMS OF POISONING:

No known symptoms.

FIRST AID:

1. **Inhalation** - Move to fresh air. Keep patient warm and at rest. If symptoms persist, call a physician.
2. **Skin contact** - Wash off immediately with soap and plenty of water. Get medical attention if irritation develops and persists.
3. **Eye contact** - Wash off immediately with plenty of water for at least 15 minutes. If the patient wears contact lenses, remove them after the first 5 minutes and continue rinsing eye. Get medical attention if irritation develops and persists.
4. **Ingestion** - **DO NOT** induce vomiting. In the event of a mouthful or more being ingested, the following measures should be considered: Rinse mouth, ingest activated charcoal. If symptoms persist, call a physician.

NOTE TO PHYSICIAN:

Risks:

Contains hydrocarbon solvents. May pose an aspiration pneumonia hazard.

Treatment:

Treat symptomatically.

There is no specific antidote.

In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable.

Antidote: No specific antidote is known.

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Zim/1218/Resolve 15L/Back Booklet Code: 86276100A

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Antidote: No specific antidote is known.

WARRANTY:

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions because the action and effect thereof may be affected by factors such as abnormal climatic and storage conditions; quality of dilution water; compatibility with other substances not indicated on the label and the occurrence of resistance of the pathogen against the remedy concerned as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for lack of performance of the remedy concerned due to failure of the user to follow the label instructions or to the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

DIRECTIONS FOR USE: Use only as directed.

RESISTANCE WARNING:

To delay herbicide resistance:

- Avoid exclusive repeated use of herbicides from the same herbicide Group Code. Alternate or tank mix with products from different herbicide Group Codes.
- Integrate other control methods (chemical, cultural, biological) into weed control programmes.

Application

Ensure that complete and even coverage of all weeds are achieved. In dense weed and/or crop stands, good control may not be achieved. In these situations a later clean-up spray of a suitable herbicide is recommended.

Time of day

Optimum performance of **Resolve** occurs when it is applied in warmer temperatures with high light intensity. Avoid application within 1 hour of sunset, or at night, particularly if followed by low overnight temperatures.

Effect of climate

Activity of **Resolve** will be reduced if weeds are stressed. Optimum results will be obtained if high temperature and high light intensity and good soil moisture exists at application.

DO NOT use if rainfall or irrigation is to occur within 2 hours of application.

Effect of temperature

DO NOT apply to frost affected weeds or if frost is imminent. Frost causes stress on weeds and could result in decreased weed control. To ensure optimum results, **Resolve** should only be applied once the weeds are no longer under stress from the frost conditions.

MIXING INSTRUCTIONS:

Half fill the spray tank with clean water. With agitators in motion, add the correct amount of **Resolve** directly into the spray tank and then add other relevant compatible products. Complete filling the tank with water with agitators in motion. Agitation must continue before and during spraying.

METHOD OF APPLICATION:

GROUND APPLICATION:

For application by means of a tractor-mounted sprayer, the use of a conventional spray boom fitted with flat fan nozzles is recommended. Use a low spray pressure (100 - 300 kPa) so that **Resolve** is applied as a coarse droplet spray. **DO NOT APPLY AT HIGH PRESSURE.** Ensure thorough coverage of the weeds by applying at least 200 litres of the spray mixture per hectare.

CROP	DOSE RATE PER HECTARE	REMARKS
WHEAT and BARLEY	<p>GROUND APPLICATION: 750 ml Resolve/ha in at least 200 ℓ of spray mixture per hectare.</p> <p>Mix 60 ml/Knapsack (16 ℓ) and apply at least 200 ℓ of spray mix/ha</p>	<p>Apply when the weeds are fully emerged. The ideal time of application is at 4-leaf growth stage, but not later than the 6-leaf growth stage of the weeds.</p> <p>HARVEST: No withholding period required when product is used as directed.</p>



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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name RESOLVE EC347,35
Product code (UVP) 79002149

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

Use Herbicide
Restrictions on use See product label for restrictions.

1.3 Details of the supplier of the safety data sheet

Supplier Bayer (Pty) Ltd.
27 Wrench Road, P.O. Box 143
1600 Isando
South Africa
Telephone +27 (011) 921 5911
Telefax +27 (011) 921 5766
Responsible Department QHSE - Nigel, South Africa
+27 (011) 365 8675 (during business hours only)

1.4 Emergency telephone no.

Emergency telephone no. +27 (0861) 555 777 (Western Cape Poisons Helpline)
Global Incident Response Hotline (24h) +1 (760) 476 3964 (Company 3E for Bayer AG, Crop Science Division)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Carcinogenicity: Category 2
H351 Suspected of causing cancer.
Reproductive toxicity: Category 2
H361d Suspected of damaging the unborn child.
Aspiration hazard: Category 1
H304 May be fatal if swallowed and enters airways.
Eye irritation: Category 2
H315 Causes skin irritation.
Acute aquatic toxicity: Category 1
H400 Very toxic to aquatic life.
Chronic aquatic toxicity: Category 1
H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Hazard label for supply/use required.



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Hazardous components which must be listed on the label:

- Pyrasulfotole
- Bromoxynil octanoate
- Bromoxynil heptanoate
- Naphthalene



Signal word: Danger

Hazard statements

- H304 May be fatal if swallowed and enters airways.
 H319 Causes serious eye irritation.
 H351 Suspected of causing cancer.
 H361d Suspected of damaging the unborn child.
 H410 Very toxic to aquatic life with long lasting effects.
 EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statements

- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/ physician.
 P331 Do NOT induce vomiting.
 P501 Dispose of contents/container in accordance with local regulation.

2.3 Other hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical nature

Emulsifiable concentrate (EC)

Hazardous components

Hazard statements according to Regulation (EC) No. 1272/2008

Name	CAS-No. / EC-No. / REACH Reg. No.	Classification	Conc. [%]
		REGULATION (EC) No 1272/2008	
Pyrasulfotole	365400-11-9	Aquatic Chronic 3, H412	3,3
Bromoxynil octanoate	1689-99-2	Aquatic Acute 1, H400 Skin Sens. 1, H317 Aquatic Chronic 1, H410 Acute Tox. 4, H302 Repr. 2, H361d Acute Tox. 3, H331	13,4
Bromoxynil heptanoate	56634-95-8	Repr. 2, H361d Acute Tox. 4, H302 Acute Tox. 4, H332	12,9

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		Aquatic Acute 1, H400 Skin Sens. 1, H317 Aquatic Chronic 1, H410	
Mefenpyr-diethyl	135590-91-9	Aquatic Chronic 2, H411	0,83
2-Ethylhexanole	104-76-7	Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	> 1 – < 10
Propylene carbonate	108-32-7	Eye Irrit. 2, H319	> 1 – < 25
Isotridecanol, ethoxylated	9043-30-5	Acute Tox. 4, H302 Eye Dam. 1, H318	> 1 – < 10
Solvent Naphtha (petroleum), heavy aromatic	64742-94-5 01-2119451151-53-xxxx	Carc. 2, H351 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	> 25
Dodecyl benzene sulphonate, calcium salt	26264-06-2	Skin Irrit. 2, H315 Eye Dam. 1, H318	> 1 – < 10

Further information

Bromoxynil octanoate	1689-99-2	M-Factor: 10 (acute), 10 (chronic)
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For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures**

General advice	Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.
Inhalation	Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.
Skin contact	Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. If symptoms persist, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed**Symptoms** Aspiration may cause pulmonary oedema and pneumonitis.**4.3 Indication of any immediate medical attention and special treatment needed****Risks** Contains hydrocarbon solvents. May pose an aspiration pneumonia hazard.



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Treatment Treat symptomatically. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. There is no specific antidote.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Water, Alcohol-resistant foam, Dry powder, Carbon dioxide (CO₂)

Unsuitable None known.

5.2 Special hazards arising from the substance or mixture Dangerous gases are evolved in the event of a fire.

5.3 Advice for firefighters

Special protective equipment for firefighters In the event of fire, wear self-contained breathing apparatus.

Further information Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Precautions Use personal protective equipment. Remove all sources of ignition.

6.2 Environmental precautions Do not allow to get into surface water, drains and ground water. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container.

6.4 Reference to other sections Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling Use only in area provided with appropriate exhaust ventilation.

Advice on protection against fire and explosion Keep away from heat and sources of ignition.

Hygiene measures Remove Personal Protective Equipment (PPE) immediately after handling this product. Remove and wash contaminated gloves, including the inside, before re-use. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean



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clothing.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container. Store in a place accessible by authorized persons only.

Suitable materials Coex HDPE/EVOH
Black mild steel sheet with interior coating

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Pyrasulfotole	365400-11-9	0,3 mg/m ³ (TWA)		OES BCS*
Bromoxynil octanoate	1689-99-2	0,21 mg/m ³ (SK-SEN)		OES BCS*
Mefenpyr-diethyl	135590-91-9	10 mg/m ³ (TWA)		OES BCS*
Naphthalene	91-20-3	50 mg/m ³ /10 ppm (TWA)	1995	ZA REL
Naphthalene	91-20-3	75 mg/m ³ /15 ppm (STEL)	1995	ZA REL
Naphthalene	91-20-3	10 ppm (TLV)		OES BCS*

*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

8.2 Exposure controls

Respiratory protection Wear respirator with an organic vapours and gas filter mask (protection factor 10) conforming to EN140 type A or equivalent.

Hand protection Chemical resistant nitrile rubber gloves

Eye protection Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

Skin and body protection Wear standard coveralls and Category 3 Type 3 suit.
Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

General protective measures Use only in area provided with appropriate exhaust ventilation.
Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water.
Keep and wash PPE separately from other laundry.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form Liquid, clear
Colour beige to brown
Odour aromatic, solvent-like

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Odour Threshold	No data available
pH	ca. 3,9 at 10 % (23 °C) (deionized water)
Flash point	90 °C
Density	1,14 g/cm ³ at 20 °C
Solubility/qualitative	No data available
Water solubility	No data available
Partition coefficient: n-octanol/water	Pyrasulfotole: log Pow: -1,362 Bromoxynil octanoate: log Pow: 5,4 Bromoxynil heptanoate: log Pow: 5,9 Mefenpyr-diethyl: log Pow: 3,83 at 21 °C
Viscosity, dynamic	19,8 mPa.s at 25 °C

SECTION 10: STABILITY AND REACTIVITY**10.1 Reactivity****Thermal decomposition** Not applicable**10.2 Chemical stability** Stable under normal conditions.**10.3 Possibility of hazardous reactions** No hazardous reactions when stored and handled according to prescribed instructions.**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects****Acute oral toxicity** LD50 (Rat) > 300 - < 2.000 mg/kg**Acute inhalation toxicity** LC50 (Rat) > 5 mg/l
Exposure time: 4 h
Determined in the form of liquid aerosol.
Highest attainable concentration.**Acute dermal toxicity** LD50 (Rat) > 4.000 mg/kg**Skin irritation** Mild skin irritation. (Rabbit)**Eye irritation** Moderate eye irritation. (Rabbit)**Sensitisation** Non-sensitizing. (Guinea pig)**Assessment STOT Specific target organ toxicity – single exposure**

Pyrasulfotole: Based on available data, the classification criteria are not met.

Bromoxynil octanoate: Based on available data, the classification criteria are not met.

Mefenpyr-diethyl: Based on available data, the classification criteria are not met.

Assessment STOT Specific target organ toxicity – repeated exposure

Pyrasulfotole did not cause specific target organ toxicity in experimental animal studies.

Bromoxynil octanoate caused specific target organ toxicity in experimental animal studies in the following organ(s): Liver. The observed effects do not appear to be relevant for humans.

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Bromoxynil heptanoate caused specific target organ toxicity in experimental animal studies in the following organ(s): Liver. The observed effects do not appear to be relevant for humans.
Mefenpyr-diethyl did not cause specific target organ toxicity in experimental animal studies.

Assessment mutagenicity

Pyrasulfotole was not genotoxic in a battery of in vitro and in vivo tests.
Bromoxynil octanoate was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.
Bromoxynil heptanoate was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.
Mefenpyr-diethyl was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Pyrasulfotole caused at high dose levels an increased incidence of tumours in the following organ(s): Cornea, urinary bladder. The mechanism that triggers tumours in rodents and the type of tumours observed are not relevant to humans.
Bromoxynil octanoate caused at high dose levels an increased incidence of tumours in the following organ(s): Liver. The mechanism of tumour formation is not considered to be relevant to man.
Bromoxynil heptanoate caused at high dose levels an increased incidence of tumours in mice in the following organ(s): Liver. The mechanism of tumour formation is not considered to be relevant to man.
Mefenpyr-diethyl was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction

Pyrasulfotole did not cause reproductive toxicity in a two-generation study in rats.
Bromoxynil octanoate did not cause reproductive toxicity in a two-generation study in rats.
Bromoxynil heptanoate did not cause reproductive toxicity in a two-generation study in rats.
Mefenpyr-diethyl did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Pyrasulfotole did not cause developmental toxicity in rats and rabbits.
Bromoxynil octanoate caused a delayed foetal growth, an increased incidence of non-specific malformations. Bromoxynil octanoate caused developmental toxicity only at dose levels toxic to the dams.
Bromoxynil heptanoate caused developmental toxicity only at dose levels toxic to the dams.
Bromoxynil heptanoate caused a delayed foetal growth, an increased incidence of non-specific malformations.
Mefenpyr-diethyl caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Mefenpyr-diethyl are related to maternal toxicity.

Aspiration hazard

May be fatal if swallowed and enters airways.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity**

Toxicity to fish	LC50 (Lepomis macrochirus (Bluegill sunfish)) 0,029 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient bromoxynil octanoate.
	LC50 (Lepomis macrochirus (Bluegill sunfish)) 0,029 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient bromoxynil heptanoate.
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) 0,046 mg/l Exposure time: 48 h



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The value mentioned relates to the active ingredient bromoxynil octanoate.

EC50 (Daphnia magna (Water flea)) 0,031 mg/l

Exposure time: 48 h

The value mentioned relates to the active ingredient bromoxynil heptanoate.

Toxicity to aquatic plants

EC50 (Navicula pelliculosa (Freshwater diatom)) 0,043 mg/l

Exposure time: 120 h

The value mentioned relates to the active ingredient bromoxynil octanoate.

EC50 (Lemna gibba (gibbous duckweed)) 0,073 mg/l

The value mentioned relates to the active ingredient bromoxynil octanoate.

12.2 Persistence and degradability

Biodegradability

Pyrasulfotole:

Not rapidly biodegradable

Bromoxynil octanoate:

Not rapidly biodegradable

Bromoxynil heptanoate:

Not rapidly biodegradable

Mefenpyr-diethyl:

Not rapidly biodegradable

Koc

Pyrasulfotole: Koc: 20 - 213

Bromoxynil octanoate: Koc: 639

Bromoxynil heptanoate: Koc: ca. 600

Mefenpyr-diethyl: Koc: 625

12.3 Bioaccumulative potential

Bioaccumulation

Pyrasulfotole:

Does not bioaccumulate.

Bromoxynil octanoate: Bioconcentration factor (BCF) 230

Does not bioaccumulate.

Bromoxynil heptanoate:

No data available, Does not bioaccumulate.

Mefenpyr-diethyl: Bioconcentration factor (BCF) 232

Does not bioaccumulate.

12.4 Mobility in soil

Mobility in soil

Pyrasulfotole: Moderately mobile in soils

Bromoxynil octanoate: Slightly mobile in soils

Bromoxynil heptanoate: Slightly mobile in soils

Mefenpyr-diethyl: Slightly mobile in soils

12.5 Results of PBT and vPvB assessment

PBT and vPvB assessment

Pyrasulfotole: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

Bromoxynil octanoate: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

Bromoxynil heptanoate: This substance is not considered to be

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persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
Mefenpyr-diethyl: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Product	Do not dispose of waste into sewer. In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.
Contaminated packaging	Triple rinse containers. Rinsed packaging may be acceptable for landfill, otherwise incineration will be required in accordance with local regulations. Not completely emptied packagings should be disposed of as hazardous waste.

SECTION 14: TRANSPORT INFORMATION**SANS 10231**

14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BROMOXYNIL, PETROLEUM DISTILLATES SOLUTION)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environm. Hazardous Mark	YES

IMDG

14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BROMOXYNIL, PETROLEUM DISTILLATES SOLUTION)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Marine pollutant	YES

IATA

14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BROMOXYNIL, PETROLEUM DISTILLATES SOLUTION)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environm. Hazardous Mark	YES

14.6 Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

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No transport in bulk according to the IBC Code.

SECTION 15: REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****SECTION 16: OTHER INFORMATION****Text of the hazard statements mentioned in Section 3**

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H361d	Suspected of damaging the unborn child.
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.

Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
Conc.	Concentration
EC-No.	European community number
ECx	Effective concentration to x %
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
EN	European Standard
EU	European Union
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)
ICx	Inhibition concentration to x %
IMDG	International Maritime Dangerous Goods
LCx	Lethal concentration to x %
LDx	Lethal dose to x %
LOEC/LOEL	Lowest observed effect concentration/level
MARPOL	MARPOL: International Convention for the prevention of marine pollution from ships
N.O.S.	Not otherwise specified
NOEC/NOEL	No observed effect concentration/level
OECD	Organization for Economic Co-operation and Development
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006



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TWA Time weighted average
UN United Nations
WHO World health organisation

The information contained within this Safety Data Sheet is in accordance with the guidelines established by Regulation (EU) 1907/2006 and Regulation (EU) 2015/830 amending Regulation (EU) No 1907/2006 and any subsequent amendments. This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.