



Safety Data Sheet

According to Regulation (EC) No 453/2010 (REACH)

Trade name: Resolva Pro Xtra Tough Weedkiller Concentrate

Version:1.0

Revision date: 28.01.2020

Print date:28.01.2020

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

1.1 Product **Resolva Pro Xtra Tough Weedkiller Concentrate** **MAPP 18934 PCS 06326**

1.2 Relevant identified use Herbicide

1.3 Details of the supplier of the safety data sheet:

Westland Horticulture Ltd
14 Granville Industrial Estate
Granville Road
Dungannon
County Tyrone
BT70 1NJ

Email customerservice@WestlandHorticulture.com

1.4 Emergency telephone number 01480 443789 (UK) 24hrs

2. HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture According to Regulation (EC) No 1272/2008:
Aquatic Chr, 3 H412 Harmful to aquatic life with long lasting effects

2.2 Label Elements According to Regulation (EC) No 1272/2008:

Hazard Pictograms GHS09 – Environmentally damaging



Signal Word Warning

Hazard Statements H412 Harmful to aquatic life with long lasting effects

Precautionary Statements

P102 Keep out of reach of children
P270 Do not eat, drink or smoke when using this product
P280 Wear suitable gloves, protective clothing and eye/face protection
P301+312 If swallowed, seek medical advice and show this container or label
P305+351 If in eyes, rinse cautiously with water for several minutes
P273 Avoid release to the environment



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P501

Dispose of contents/container to an approved waste disposal contractor or collection site

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances: N/A

3.2 Description Herbicide containing 151.04 g/l Glyphosate as a concentrate

Hazardous Ingredients

| Ingredient | Identifiers | Concentration %W/W | Warning Symbols | Regulation (EC) No 1272/2008 (CLP) |
|---|--|--------------------|-----------------|------------------------------------|
| Glyphosate diammonium | CAS: 69254-40-6 | 15.1 % | | Aquatic Chr. 2 H411 |
| D-Glucopyranose, oligomeric, decyl octyl glycosides | CAS: 68515-73-1 REACH: 01-2119488530-36-0 | 4-10 % | | Eye Dam. 1, H318 |

For the full text of the H Statements mentioned in this section, see section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General information: Have the product container, label or Material Safety Data Sheet with you when calling a poison control center or physician, or going for treatment.
Remove any clothing soiled by the product

Inhalation: Move the victim to fresh air or supply oxygen
If breathing is irregular or stopped, administer artificial respiration.
Keep patient warm and at rest.
Call a doctor or Poison Control Centre.

Skin Contact: Take off all contaminated clothing



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Wash off with plenty of soap and water
Wash contaminated clothing before re-use.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses and continue flushing.
Consult a doctor

Ingestion: If swallowed seek medical advice immediately and show container or label.

4.2 Most important symptoms and effects, both acute and delayed: N/A

4.3 Indication of any immediate medical attention and special treatment needed: N/A

5. FIRE FIGHTING MEASURES

5.1 Extinguishing Media:

Extinguishing media – small fires: Use water jet, alcohol-resistant foam, dry chemical or carbon dioxide

Extinguishing media – large fires: Alcohol resistant foam or water jet

5.2 Specific Hazards Arising From the Substance or Mixture:

Possible formation of toxic gases during heating or in fire: nitrogen oxides (NO_x), carbon monoxide (CO), sulphur dioxide (SO₂). Under certain conditions traces of other toxic gases cannot be excluded.

5.3 Advice for Fire Fighters:

Wear full protective clothing and self-contained breathing apparatus.
Do not inhale explosion or combustion gases.

Additional Information:

Do not allow run-off from fire fighting to enter drains or water courses.
Dispose of fire debris and contaminated water in accordance with official regulations.
Cool closed containers exposed to fire with water spray. Keep upwind



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6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Refer to protective measures listed in sections 7 and 8.
Keep unprotected people away

6.2 Environmental Precautions:

Inform respective authorities in case product reaches water or sewage system.
Do not allow to enter drainage system, surface or ground water.

6.3 Methods and Materials for Containment and Cleaning Up:

Absorb with liquid binding material (sand, diatomite, acid binder, universal binder, sawdust).
Dispose of contaminated material as waste according to Section 13.
Ensure adequate ventilation

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Handling:

- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of aerosols, work only in fume cupboard.
- Keep ignition sources away.
- Do not drink, eat or smoke while working.
- The product is not flammable.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

- Store only in original container.
- Keep containers closed tightly in a dry, cool and well-ventilated place.
- Keep out of reach of children
- Keep away from food, drink and animal feeding stuffs.
- Protect from frost
- Protect from heat and direct sunlight

7.3 Specific End Uses:

Use only as herbicide according to the instruction on the label



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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters

| Component(s) | Exposure Limit(s) | Type of exposure limit | Source |
|--------------|---------------------|------------------------|----------|
| Glyphosate | 10mg/m ³ | 8 h TWA | SYNGENTA |

8.2 Exposure Controls

8.2.1 Appropriate engineering controls: The use of technical measures should always have priority over the use of personal protective equipment

8.2.2 Personal protective equipment: The use of technical measures should always have priority over the use of personal protective equipment
When selecting personal protective equipment, seek appropriate professional advice
Personal protective equipment should be certified to appropriate standards

Respiratory Protection: No personal respiratory protective equipment normally required.
A particulate filter respirator may be necessary until effective technical measures are installed.

Hand Protection: Chemical resistant gloves are not usually required.
Select gloves based on the physical job requirements.

Eye Protection: Eye protection is not usually required
Follow any site specific eye protection policies

Skin And Body Protection: No special protective equipment required
Select skin and body protection based on the physical job requirements

8.2.3 Environmental exposure controls: N/A

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties



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Appearance: Brownish-clear liquid

Physical state: Liquid

Colour: brownish, clear

Odour: Characteristic

Odour threshold: no data

9.2 Other information:

| | Value | Concentration | Method | Temperature | Pressure | Remark |
|--|-------------------------|---------------|---------|-------------|----------|---------|
| pH | 6.3 | No data | No data | 25°C | No data | No data |
| Melting point /freezing point | No data | No data | No data | No data | No data | No data |
| Initial boiling point/boiling range | No data | No data | No data | No data | No data | No data |
| Flash point | >101°C | No data | No data | No data | No data | No data |
| Evaporation rate | No data | No data | No data | No data | No data | No data |
| Flammability (solid, gas) | No data | No data | No data | No data | No data | No data |
| Upper/lower flammability or explosive limits | No data | No data | No data | No data | No data | No data |
| Upper explosive limits | No data | No data | No data | No data | No data | No data |
| Lower explosive limits | No data | No data | No data | No data | No data | No data |
| Vapour pressure | No data | No data | No data | No data | No data | No data |
| Vapour density | No data | No data | No data | No data | No data | No data |
| Relative density | 1.131 g/cm ³ | No data | No data | 20°C | No data | No data |
| Solubility(ies) | Soluble in water | No data | No data | No data | No data | No data |
| Partition coefficient: n-octanol/water | No data | No data | No data | No data | No data | No data |
| Auto-ignition temperature | No data | No data | No data | No data | No data | No data |
| Decomposition temperature | No data | No data | No data | No data | No data | No data |
| Viscosity | No data | No data | No data | No data | No data | No data |
| Viscosity, dynamic | 18.1 mPa.s @20°C | No data | No data | No data | No data | No data |
| Viscosity, cinematic | No data | No data | No data | No data | No data | No data |
| Explosive properties | No data | No data | No data | No data | No data | No data |
| Oxidising properties | No data | No data | No data | No data | No data | No data |

Physical hazards: N/A

10 STABILITY AND REACTIVITY

10.1 Reactivity: Hazardous reactions will not occur under normal transport or storage conditions



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10.2 Chemical Stability: Stable under normal conditions of storage, handling and use

10.3 Possibility of hazardous reactions: No information available

10.4 Conditions To Avoid: No information available, stable under normal conditions

10.5 Incompatible Materials: No information available

10.6 Hazardous Decomposition products: No decomposition if used according to specifications
Thermal decomposition products may include toxic and corrosive fumes of chlorides and toxic oxides of nitrogen.

11 TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution

The toxicological data has been taken from higher concentration products

11.1 Information on toxicological effects

Acute Oral Toxicity: LD50 Median lethal dose rat 5,000 mg/kg

Acute Inhalation Toxicity: LC50 Median lethal concentration Rat, >5.12mg/l, 4h

Acute Dermal Toxicity: LD50 Median lethal dose Rat, >5,000 mg/kg

Skin corrosion/Irritation: Rabbit-mildly irritating

Eye damage/ Irritation: Rabbit-mildly irritating

Respiratory or Skin Sensitization: No sensitization effect known

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) No mutagenic, carcinogenic, teratogenic or reproductive toxicity effects known

STOT- repeated exposure: No data available

12 ECOLOGICAL INFORMATION

12.1 Toxicity

Based on test results obtained from higher concentration product



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- **Toxicity To Fish:** LC50 Oncorhynchus mykiss (rainbow trout), 100 mg/l, 96h
- **Toxicity To Aquatic Invertebrates:** EC50 Daphnia magna (water flea), 100 mg/l 48h
- **Toxicity To Aquatic Plants:** : EbC50 Desmodesmus subspicatus (green algae), 100 mg/l, 72 h
ErC50 Desmodesmus subspicatus (green algae), >100 mg/l, 72 h
- **Sediment Toxicity: None**

Terrestrial toxicity:

- **Toxicity to Bird:** LC50 >3851mg/kg
- **Toxicity to bee:** LD50>100µg/bee

12.2 Persistence and Degradability:

- **Stability in Water:** Glyphosate Diammonium: Degradation half life: 302 d. Persistent in water.
- **Stability in Soil:** Glyphosate Diammonium: Degradation half life: 1.4-19d. Not persistent in soil.
- **Mobility in Soil:** Glyphosate is immobile in soil.

12.3 Bioaccumulative Potential: Does not bioaccumulate

12.4 Mobility in Soil: Strongly absorbs to soil

12.5 Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6 Other adverse effects: No data

Other information

Avoid release to the environment

Do not allow product to reach groundwater, water bodies or sewage system



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13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product: Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not dispose of waste into sewer.
Where possible recycling is preferred to disposal or incineration.
If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated Packaging: Empty remaining contents.
Completely empty containers can be put in the bin or disposed of in compliance with applicable local regulations
Do not reuse empty containers.

14 TRANSPORT INFORMATION

| | Land transport (ADR/RID) | Inland waterway transport (ADN) | Sea transport (IMDG) | Air transport (ICAO-TI / IATA-DGR) |
|---------------------------------|--------------------------|---------------------------------|----------------------|------------------------------------|
| 14.1 UN No. | Not dangerous goods | Not dangerous goods | Not dangerous goods | Not dangerous goods |
| 14.2 UN Proper shipping name | Not dangerous goods | Not dangerous goods | Not dangerous goods | Not dangerous goods |
| 14.3 Transport hazard class(es) | Not dangerous goods | Not dangerous goods | Not dangerous goods | Not dangerous goods |
| Hazard label(s) | Not dangerous goods | Not dangerous goods | Not dangerous goods | Not dangerous goods |
| 14.4 Packing group | Not dangerous goods | Not dangerous goods | Not dangerous goods | Not dangerous goods |
| 14.5 Environmental hazards | Not dangerous goods | Not dangerous goods | Not dangerous goods | Not dangerous goods |

14.6 Special precautions for user: None



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14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Additional information: None

15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance of mixture:

This mixture is classified and labelled according to the CLP Regulation (EC) No 1272/2008

15.2 Chemical Safety Assessment: No information available

16 OTHER INFORMATION

16.1 Indication of changes: None

16.2 Abbreviations and Acronyms

| | |
|------------------------------|--|
| ADR | International Carriage of Dangerous Goods by Road |
| CAS No | Chemicals Abstract Service Registry Number |
| Directive 67/548/EEC | Dangerous Substances Directive (DSD) |
| EC No | European Community Number for chemicals within EU regulations |
| IATA-DGR | Dangerous Goods Regulations by the International Air Transport Association |
| IMDG Code | International Maritime Dangerous Goods Code |
| MAPP | Ministerially Approved Pesticide Product |
| PBT | Persistent, Bioaccumulative and Toxic Properties |
| Regulation (EC) No 1272/2008 | Classification, Labelling and Packaging (CLP) |
| RID | International Transport of Dangerous Goods by Rail |
| vPvB | Very Persistent and Very Bioaccumulative Properties |

16.3 Key literature references and sources for data: Syngenta

16.4 Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008

[CLP]: See SECTION 2.1 (classification).

- **CLP/GHS:** Aquatic Chr 2; Aquatic Chronic Toxicity, Category 2
Eye Dam 1; Eye Damage, Category 1



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16.5 Relevant H- and EUH-phrases (number and full text):

H318 Causes serious eye damage

H412 Harmful to aquatic life with long lasting effects

16.6 Training advice: Follow the instructions

16.7 Further information

Before using this product, ensure that you read and understand its label

MSDS information:

This Safety Data Sheet is prepared in compliance with Directive 1999/45/EC, 1272/2008 and Annex I of the REACH regulation 453/2010.

This safety data sheet provides health and safety information. This product is to be used in applications with best use practice. Individuals handling this product should be informed under COSHH of the recommended safety precautions and should have access to this information. The product information in this data sheet is to the best of our knowledge correct as at the date of publication. Westland Horticulture Limited does not accept responsibility for damage caused by incorrect use of this information.

Training and related advice:

This document contains important information to ensure the safe storage, handling and use of this product. It is the responsibility of your organisation to ensure that the information contained in this document is communicated to the end user and that all necessary training to enable the product to be used correctly has been given.

For further information please contact Westland Horticulture Ltd, 14 Granville Industrial Estate, Granville Road, Dungannon, County Tyrone, BT70 1NJ.