



Safety Data Sheet

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

Trade name: Resolva Pro Xtra Tough Tree Stump killer

Version: 1.0

Revision date: 30.07. 2019

Print date:30.07 2019

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

1.1 Product Identifier

Name Resolva Pro Xtra Tough Tree Stump killer MAPP 19176

CAS No 1071-83-6

1.2 Relevant Identified Uses of the Mixture

Usage Herbicide

1.3 Details of the Supplier of the Safety Data Sheet

Supplier 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) 24 hrs

2. HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture According to Regulation (EC) No 1272/2008:

The mixture does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008

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

Hazard Pictograms None

Signal Word None

Hazard Statements None

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Precautionary Statements

P102	Keep out of reach of children
P262	Do not get in eyes, on skin or on clothing
P270	Do not eat, drink or smoke when using this product
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
P501	Dispose of contents/container to an approved waste disposal contractor or collection site

Supplemental Hazard Information: none

Special rules for supplemental label elements for certain mixtures: none

Additional labelling: none

2.3 Other hazards: none


3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances N/A

3.2 Mixtures

Description Herbicide containing 7.2%W/W of glyphosate as a ready to use liquid suspension

Hazardous Ingredients

Ingredient	Identifiers	Concentration %W/W	Warning Symbols	Regulation (EC) No 1272/2008 (CLP)
Glyphosate	EC: 213-997-4 CAS: 1071-83-6	7.2 % W/W		Eye Dam. 1, H318 Aquatic Chr. 2, H411

Additional Information:

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This mixture does not contain further substances fulfilling the criteria of hazard class "acute toxicity" according to CLP regulation

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
Keep patient warm and at rest.
Seek medical attention if symptoms persist or develop

Skin Contact: Wash off with plenty of soap and water immediately
Take off all contaminated clothing and launder before re-use
Seek medical attention if symptoms persist or develop

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses and continue flushing.
Seek medical attention if symptoms persist or develop

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

Self-protection of the first-aider: Wear gloves as standard practice

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: - None

Effects: None

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

No further relevant information available

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5. FIRE FIGHTING MEASURES

5.1 Suitable 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 Special Protective Equipment for Fire Fighters:

Wear full protective clothing and self-contained breathing apparatus.

Do not inhale explosion or combustion gases.

Further 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

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

For non-emergency personnel: Keep unprotected people away

6.2 Environmental precautions: Restrict access to the area as appropriate until clean-up operations are complete. Inform respective authorities in case product reaches water or sewage system. Do not allow to enter drainage system, surface or ground water.

Sweep up contaminated absorbent material and place in a marked container for disposal as waste according to Section 13. Ensure adequate ventilation. Contaminated surfaces may be cleaned using water or water-detergent mixture

6.3: Methods and Materials for Containment and Cleaning Up: Absorb with liquid binding material (sand, diatomite, acid binder, universal binder, sawdust, earth).

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6.4 Reference to other sections: Refer to protective measures listed in sections 7 and 8.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures:

Handling:

- Ensure good ventilation/exhaustion at the workplace, prevent formation of aerosols
- Avoid contact with the eyes and skin.
- Take off immediately all contaminated clothing
- Wash hands during breaks and after using this product
- Do not drink, eat or smoke while handling this product
- Keep children and pets away from treated areas until spray has dried

7.2 Conditions for safe storage, including any incompatibilities

- 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
- Keep ignition sources away
- Protect from heat and direct sunlight

7.3 Specific End Uses:

Use only as herbicide according to the instruction on the label

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1: Control Parameters

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8.1.1: Occupational Exposure limits:

Limit value type (country of origin)	Substance name	EC-No.	CAS.No	Occupational exposure limit value		Monitoring and observation processes	Peak limitation	Source
				Long term	Short term			
OEL (EU)	Glyphosate	213-997-4	1071-83-6	8h TWA			10mg/m ³	Syngenta

8.1.2 Biological limit values:

Limit value type (country of origin)	Substance name	EC-No.	CAS-No.	Limit Value	Parameter	Test material	Test date	Source
OEL (EU)	Glyphosate	213-997-4	1071-83-6	10mg/m ³	No data	No data	No data	Syngenta

8.1.3: Exposure limits at intended use

The usual precautionary measures should be adhered to general rules for handling chemicals.

8.1.4: DNEL/PNEC-values: N/A

8.1.5 Risk management measures according to used control banding approach

Control banding for chemicals according to the ILO CHEMICAL CONTROL TOOLKIT (ICCT)

Task	Hazard band	Scale of use	Ability to become airborne	Control approach	Control guidance sheet
N/A	N/A	N/A	N/A	N/A	N/A



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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:

Protective Measures: When selecting personal protective equipment, seek appropriate professional advice. Personal protective equipment should be certified to appropriate standards

Respiratory Protection: Breathing protection is recommended during spraying. Recommended filter device: Filter P1

Hand Protection: Protective gloves (rubber)

Eye Protection: Safety glasses

Skin And Body Protection: Protective work clothing

8.2.3 Environmental exposure controls:

Consumer exposure control: See section 8.14

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Colourless liquid

Physical state: Liquid

Colour: Colourless

Odour: Characteristic

Odour threshold: no data



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Other Properties:

Explosive properties: Product is not explosive

9.2 Other information:

	Value	Concentration	Method	Temperature	Pressure	Remark
pH	3.54	No data	No data	20°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	No data	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	1.1 g/ml	No data	No data	No data	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	No data	No data	No data	No data	No data	No data
Viscosity, cinematic	1.645cSt	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

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

10.3 Possibility of hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions



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10.4 Conditions To Avoid: Extremes of temperature. It must be protected from frost

10.5 Incompatible Materials: No information available

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

11. TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution

The toxicological data has been taken from higher concentration products

11.1 Information on toxicological effects

11.1.1

Acute toxicity

Practical experience / human evidence:

Animal data: LD50 Median lethal dose rat 5,000 mg/kg

Other information:

Assessment / Classification: Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Practical experience / human evidence: No irritant effect

Acid-/Alkali reserve (buffer capacity for mixtures with extreme pH values)

Acidic reserve [g NaOH/100 g product]: No data

Alkaline reserve [g H₂SO₄/100 g product]: No data

Animal data: LD50 Median lethal dose Rat, >5,000 mg/kg

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In-vitro skin test: No data

Other information: None

Assessment / Classification: No irritant effect

Eye damage/irritation

Practical experience / human evidence: No irritant effect

Animal data: No data

In vitro eye test: No data

Other information: None

Assessment / Classification: Based on available data, the classification criteria are not met.

Sensitisation to the respiratory tract/skin

Sensitisation to the respiratory tract

Practical experience / human evidence: No sensitization effect known

Other information:

Assessment / Classification: Based on available data, the classification criteria are not met.

Skin sensitisation

Practical experience / human evidence: No sensitization effect known

Animal data: No sensitization effect known

Other information: None

Assessment / Classification: Based on available data, the classification criteria are not met.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

Reproductive toxicity

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Practical experience / human evidence: No mutagenic, carcinogenic, teratogenic or reproductive toxicity effects known

Animal data: No mutagenic, carcinogenic, teratogenic or reproductive toxicity effects known

Other information: None

Assessment / Classification: Based on available data, the classification criteria are not met.

Overall assessment on CMR properties: No mutagenic, carcinogenic, teratogenic or reproductive toxicity effects known

Aspiration hazard

Practical experience / human evidence: No data available.

Experimental data: viscosity data: see SECTION 9.

Assessment / Classification: Based on available data, the classification criteria are not met.

Symptoms related to the physical, chemical and toxicological characteristics:

In case of ingestion: Refer to Section 4 of this Document

In case of skin contact: Refer to Section 4 of this Document

In case of inhalation: Refer to Section 4 of this Document

In case of eye contact: Refer to section 4 of this Document

11.1.2 Mixtures

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

Skin/Eye irritation: No irritant effect

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

Sensitisation: No sensitization effect known

Repeated dose toxicity: LC50 Median lethal concentration Rat, >5.7 mg/l, 4h

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Carcinogenicity: No mutagenic, carcinogenic, teratogenic or reproductive toxicity effects known

Mutagenicity: No mutagenic, carcinogenic, teratogenic or reproductive toxicity effects known

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

- **Toxicity To Fish:** LC50 >100mg/l
- **Toxicity To Aquatic Invertebrates:** Daphnia magna (water flea) LC50 >100 mg/l
- **Toxicity To Aquatic Plants:** Algae EC50 >100mg/l
- **Sediment Toxicity:** None
- **Terrestrial Toxicity:**

Toxicity to Bird: LC50 >3851mg/kg

Toxicity to bee: LD50>100µg/bee

12.2 Persistence and Degradability: Not persistent in water, moderately persistent in soil

12.3 Bioaccumulative Potential: Does not bioaccumulate

12.4 Mobility in Soil: Strongly absorbs to soil



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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 available

Additional ecotoxicological information

Avoid release to the environment

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

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product / Packaging disposal:

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



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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

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

Additional information

15. REGULATORY INFORMATION

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

15.1.1 EU regulations

Authorisations and/or restrictions on use:

Authorisations: MAPP 19176

Restrictions on use: No data available

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

15.1.2 National regulations



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

15.2 Chemical Safety Assessment:

For this substance a chemical safety assessment is not required.

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 Unknown

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

See SECTION 2.1 (classification).

16.5 Full texts of abbreviated H Statements referred to under Section 3:

H318	Causes serious eye damage
H411	Toxic to aquatic life with long lasting effects

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Full text of Classifications

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

16.6 Training advice:

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

16.7 Further information

MSDS information:

This Safety Data Sheet is prepared in compliance with Regulation 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.