



SAFETY DATA SHEET

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

Product	Resolva Xtra Tough RTU
Usage	Herbicide
Manufacturer	Westland Horticulture Ltd 14 Granville Industrial Estate Granville Road Dungannon County Tyrone BT70 1NJ
Email	customerservice@WestlandHorticulture.com
Emergency Tel	01480 443789 (UK)

2. HAZARDS IDENTIFICATION

Classification of the Substance or Mixture According to Regulation (EC) No 1272/2008:
Not classified

Classification of the Substance or Mixture According to Directive 67/548/EEC or Directive 1999/45/EC:
Not classified

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

Hazard Pictograms	None
Signal Word	Warning
Hazard Statements	H316 Causes mild skin irritation
Precautionary Statements	P102 Keep out of reach of children P332 + P313 If skin irritation occurs, get medical advice/attention

Label Elements According to Directive 67/548/EEC or Directive 1999/45/EC:

Hazard Pictograms	None
R- Phrases	None
S- Phrases	None



3. COMPOSITION/INFORMATION ON INGREDIENTS

Description Herbicide containing 8.4g/l of glyphosate as a ready to use aqueous solution

Hazardous Ingredients

Ingredient	Identifiers	Concentration %W/W	Warning Symbols	Directive 67/548/EEC	Regulation (EC) No 1272/2008 (CLP)
Glyphosate diammonium	CAS: 69254-40-6	0.81 % W/W		N; R51/53	Aquatic Chr. 2 H411

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

4. FIRST AID MEASURES

General Advice: Have the product container, label or Material Safety Data Sheet with you when calling a poison control center or physician, or going for treatment.

Inhalation: Move person to fresh air.
If breathing is irregular or stopped, administer artificial respiration.
Keep patient warm and at rest.
Call a physician or Poison Control Centre immediately.

Skin Contact: Take off all contaminated clothing immediately.
Wash off immediately with plenty of water.
If skin irritation persists call a physician.
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.
Immediate medical attention is required.

Ingestion: If swallowed seek medical advice immediately and show container or label.
Do NOT induce vomiting.

Most Important Symptoms and Effects, both Acute and Delayed:
No information available

Treatment (Medical Advice):
There is no specific antidote available
Treat symptomatically



5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

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

Extinguishing media – large fires: Alcohol resistant foam or Water spray

Extinguishing Media Which Must Not Be Used For Safety Reasons:

Do not use a solid water stream as it may scatter and spread fire.

Specific Hazards Arising From the Substance Or Mixture:

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).

Exposure to decomposition products may be a hazard to health

Special Protective Equipment for Fire Fighters:

Wear full protective clothing and self-contained breathing apparatus.

Further Information:

Do not allow run-off from fire fighting to enter drains or water courses.

Cool closed containers exposed to fire with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Refer to protective measures listed in sections 7 and 8.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so.

Do not flush into surface water or sanitary sewer system.

Methods and Materials For Containment And Cleaning Up:

Contain Spillage, and then collect with non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Additional Advice: If the product contaminates rivers and lakes or drains inform respective authorities.



7. HANDLING AND STORAGE

Handling:

- No special protective measures against fire required.
- Avoid contact with skin and eyes
- When using do not eat, drink or smoke
- For personal protection see Section 8

Storage:

- No special storage conditions required.
- 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
- Physically and chemically stable for at least two years when stored in the original unopened sales container at ambient temperatures.

Specific End Uses:

Use only as herbicide according to the instruction on the label

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

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

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation and packaging of the product

Exposure Controls

Engineering Measures: Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.
The extent of these protection measures depends on the actual risks in use.
If airborne mists or vapors are generated, use local exhaust ventilation controls.
Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.
Where necessary, seek additional occupational hygiene advice.

Protective Measures: 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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light brown liquid
Odour: Odourless

Other Properties:

	Value	Temperature
pH	6.3 at 1.0% w/v	
Density	1.04 g/ml	20°C
Auto-ignition temperature	> 650 °C	
Flash point	>104°C	
Explosive properties	Not explosive	
Oxidizing properties	Not oxidizing	

10. STABILITY AND REACTIVITY

Hazardous Decomposition: Combustion or thermal decomposition will evolve toxic or irritant vapours

Hazardous Reactions: None known. Hazardous polymerization does not occur.

Conditions To Avoid: No information available, stable under normal conditions of use and storage.

11. TOXICOLOGICAL INFORMATION

The toxicological data has been taken from products of similar composition

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

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

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



Skin Irritation: Rabbit: Mildly Irritating

Serious Eye Irritation: Rabbit: Mildly Irritating

Respiratory or Skin Sensitization: Buehler test guinea pig: not a skin sensitizer in animal tests.

Long Term Toxicity: Glyphosate diammonium did not show mutagenic, carcinogenic, teratogenic or reproductive toxicity effects in animal experiments.

STOT- repeated exposure: No adverse effect has been observed in chronic toxicity tests with glyphosate diammonium

12. ECOLOGICAL INFORMATION

Toxicity

The toxicity data is based on test results obtained with similar product

- **Toxicity To Fish:** LC50 *Oncorhynchus mykiss* (rainbow trout), 800 mg/l, 96h
- **Toxicity To Aquatic Invertebrates:** EC50 *Daphnia magna* (water flea), 160 mg/l 48h
- **Toxicity To Aquatic Plants:** EbC50 *Pseudokirchneriella subcapitata* (green algae), 140 mg/l, 72 h
ErC50 *Pseudokirchneriella subcapitata* (green algae), >320 mg/l, 72 h
EC50 *Lemna gibba* (duckweed), 23 mg/l, 7d

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.

Bioaccumulative Potential: Glyphosate Diammonium: no data available

Results of PBT and vPvB assessment:

Glyphosate Diammonium: is not identified as PBT nor vPvB substance



13. DISPOSAL CONSIDERATIONS

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.
Triple rinse containers. The rinse water should be added to the final spray solution. It must not be put down the drain, sink or toilet
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) Not dangerous goods

Sea Transport (IMDG) Not dangerous goods

Air Transport (IATA-DGR) Not dangerous goods

None special precautions for user

15. REGULATORY INFORMATION

Registration Numbers: MAPP 15838
PCS 04760

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

Contains: Glyphosate diammonium

Chemical Safety Assessment: A Chemical Safety Assessment is not required for this mixture



16. OTHER INFORMATION

Recommended uses and restrictions: Follow the instructions

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

H411 Toxic to aquatic life with long lasting effect

Full text of R Phrases referred to under Section 3:

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

Full text of Classifications

- **CLP/GHS:** Aquatic Chr 2; Aquatic Chronic Toxicity, Category 2
- **DSD/DPD:** N; Dangerous for the environment

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
PCS	Pesticide Control Service
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

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.