

PROLIANCE QUATTRO

Version 8 - This version replaces all previous versions.
Revision Date 17/01/2014

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

1.1 Product identifier

Product name : PROLIANCE QUATTRO

Design code : A12798QA

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

Use : Herbicide

1.3 Details of the supplier of the safety data sheet

Company : Syngenta UK Limited
CPC4, Capital Park
Fulbourn, Cambridge
CB21 5XE

Telephone : (01223) 883400

Telefax : (01223) 882195

Website : www.syngenta.co.uk

1.4 Emergency telephone number

: +44 (0) 1484 538444

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EU) 1272/2008

Chronic aquatic toxicity Category 2 H411

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

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Not classified according to EU legislation

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2.2 Label elements

Labelling: Regulation (EC) No. 1272/2008

Hazard pictograms



Signal Word	:Warning	
Hazard Statements	:H410	Toxic to aquatic life with long lasting effects
Precautions Statements	:P273 :P391 :P501	Avoid release to the environment Collect spillage Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.
Supplemental Information	:EUH401	To avoid risks to human health and the environment comply with the instructions for use.

Hazardous components which must be listed on the label:

Labelling: EU Directives 67/548/EEC or 1999/45/EC

2.3 Other hazards

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration
Glyphosate diammonium	69254-40-6	N R51/53	Aquatic Chronic2; H411	34 % W/W
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1 01-2119488530-36-0 000	Xi R41	Eye Dam.1; H318	10 - 20 % W/W

Substances for which there are Community workplace exposure limits.

For the full text of the R-phrases mentioned in this Section, see Section 16.

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 : Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control center or

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Inhalation	:	physician, or going for treatment. Move the victim 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. Immediate medical attention is required.
Ingestion	:	If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting: contains petroleum distillates and/or aromatic solvents.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available

4.3 Indication of any immediate medical attention and special treatment needed

Medical advice :
There is no specific antidote available. Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

- 5.1 Extinguishing media**
Extinguishing media - small fires
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Extinguishing media - large fires
Use alcohol-resistant foam or water spray.
Do not use a solid water stream as it may scatter and spread fire.
- 5.2 Special 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.
- 5.3 Advice for fire-fighters:**
Wear full protective clothing and self-contained breathing apparatus. Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures**
Refer to protective measures listed in sections 7 and 8. Keep people away from and upwind of spill/leak. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Remove all sources of ignition. Pay attention to flashback.
- 6.2 Environmental precautions:**
Prevent further leakage or spillage if safe to do so.
Do not flush into surface water or sanitary sewer system.
- 6.3 Methods and materials for containment and cleaning up**
Contain spillage, and then collect with non-combustible absorbent material,

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(e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4

Reference to other sections

Refer to protective measures listed in sections 7 and 8.

Refer to disposal considerations listed in section 13.

SECTION 7: HANDLING AND STORAGE

7.1

Precautions for safe 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.

7.2

Conditions for safe storage, including any incompatibilities

No special storage conditions required. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.

7.3

Specific end use(s)

Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	Exposure limit(s)	Type of exposure limit	Source
glyphosate	10 mg/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.

8.2 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 dust is 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.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State	: Liquid
Form	: Liquid
Colour	: light brown to dark brown
Odour	: sweetish, weak
Odour Threshold	: No data available
pH	: 6.8 at 25 °C
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: > 104 °C
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 1.268 g/cm ³ at 20 °C
Solubility in other solvents	: No data available
Partition Coefficient n-octanol/water	: No data available
Autoignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, dynamic	: 71 mPa.s at 20 °C 50 mPa.s at 40 °C
Viscosity, kinematic	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: Not oxidising

9.2 Other information

Surface tension	: 42.6 mN/m at 20 °C
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SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	: No information available
10.2 Chemical Stability	: No information available
10.3 Possibility of hazardous reactions	: None known. Hazardous polymerisation does not occur.
10.4 Conditions to avoid	: No information available
10.5 Incompatible materials	: No information available
10.6 Hazardous decomposition products	: Combustion or thermal decomposition will evolve toxic and irritant vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity	: LD50 female rat, > 5,000 mg/kg
Acute inhalational toxicity	: LC50 male and female rat, > 5.12 mg/l, 4 h The toxicological data has been taken from products of similar composition.
Acute dermal toxicity	: LD50 male and female rat, > 5,000 mg/kg
Skin corrosion/irritation	: rabbit: Mildly irritating

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Serious eye damage/eye irritation	:	rabbit: Mildly irritating
Respiratory or skin sensitisation	:	Buehler Test guinea pig: Not a skin sensitizer in animal tests.
Germ cell mutagenicity	:	
glyphosate-diammonium	:	Did not show mutagenic effects in animal experiments.
Carcinogenicity	:	
glyphosate-diammonium	:	Did not show carcinogenic effects in animal experiments.
D-Glucopyranose, oligomeric, decyl octyl glycosides	:	Not classifiable as a human carcinogen.
Teratogenicity	:	
glyphosate-diammonium	:	Did not show teratogenic effects in animal experiments.
Reproductive toxicity	:	
glyphosate-diammonium	:	Did not show reproductive toxicity effects in animal experiments.
D-Glucopyranose, oligomeric, decyl octyl glycosides	:	No toxicity to reproduction
STOT – repeated exposure	:	
glyphosate-diammonium	:	No adverse effect has been observed in chronic toxicity tests.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	:	LC50 <i>Oncorhynchus mykiss</i> (rainbow trout), 800 mg/l , 96 h Based on test results obtained with similar product.
Toxicity to aquatic invertebrates	:	EC50 <i>Daphnia magna</i> (Water flea), 160 mg/l , 48 h Based on test results obtained with similar product.
Toxicity to aquatic plants	:	EbC50 <i>Desmodesmus subspicatus</i> (green algae), 140 mg/l , 72 h ErC50 <i>Desmodesmus subspicatus</i> (green algae), > 320 mg/l , 72 h Based on test results obtained with similar product.

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 - 19 d. Not persistent in soil.

12.3 Bioaccumulative potential

Glyphosate-diammonium : .No data available

12.4 Mobility in soil

Glyphosate-diammonium : Immobile in soil.

12.5 Results of PBT and vPvB assessmen

Glyphosate-diammonium, D-Glucopyranose, oligomeric, decyl octyl glycosides : These substances are not considered to be persistent, bioaccumulating nor toxic (PBT).
These substances are not considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects

:Classification of the product is based on the summation of the concentrations of classified components.

SECTION 13: DISPOSAL CONSIDERATIONS

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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. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

SECTION 14: TRANSPORT INFORMATION

Land transport (ADR/RID)

14.1	UN Number	:	UN 3082
14.2	UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (GLYPHOSATE DIAMMONIUM)
14.3	Transport hazard class(es)	:	9
14.4	Packing Group	;	III
Labels		:	9
14.5	Environmental hazards Tunnel restriction code	:	Environmentally hazardous E

Sea transport(IMDG)

14.1	UN Number	:	UN
14.2	UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (GLYPHOSATE DIAMMONIUM)
14.3	Transport hazard class(es)	:	9
14.4	Packing Group	;	III
Labels		:	9
14.5	Environmental hazards	:	Marine Pollutant

Air transport (IATA-DGR)

14.1	UN Number	:	UN
14.2	UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (GLYPHOSATE DIAMMONIUM)
14.3	Transport hazard class(es)	:	9
14.4	Packing Group	;	III
Labels		:	9
14.6	Special precautions for user	:	none

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

not applicable

SECTION 15: REGULATORY INFORMATION

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

GHS-Labeling

Hazard pictograms



Signal Word

:Warning

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Hazard Statements	:H410	Toxic to aquatic life with long lasting effects
Precautions Statements	:P273 :P391 :P501	Avoid release to the environment Collect spillage Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.
Supplemental Information	:EUH401	To avoid risks to human health and the environment comply with the instructions for use.

Hazardous components which must be listed on the label:

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: OTHER INFORMATION

Further information

Approval number, MAPP.13670

Use plant protection products safely. Always read the label and product information before use.

Based upon SDS release dated 17/01/2014, version 8 with local amendment.

Full text of R-phrases referred to under sections 2 and 3:

R41	Risk of serious damage to eyes
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of H-Statements referred to under sections 2 and 3.

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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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