



EC safety data sheet

Trade name: VIVAL (Glyphosate 360 g/l)

Current version : 1.0.0, issued: 08.04.2015

Replaced version: -, issued: -

Region: GB

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name

VIVAL (Glyphosate 360 g/l)

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

Relevant identified uses of the substance or mixture

Herbicide

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Address

HELM AG

Nordkanalstraße 28

D-20097 Hamburg

Telephone no. +49(0)40 / 2375-0

Fax no. +49(0)40 / 2375-1845

Information provided by / telephone

Telephone: +49(0)40 / 23750 Fax: +49(0)40 / 23751845

Advice on Safety Data Sheet

SDB@HELMAG.COM

1.4 Emergency telephone number

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

In case of transport incidents and other emergencies (advice in German and English):

+44 (0) 1235 239 670 (NCEC, National Chemical Emergency Centre)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

Aquatic Chronic 2; H411

Eye Irrit. 2; H319

Skin Sens. 1; H317

Classification in accordance with Directive 67/548/EEC or 1999/45/EC

R43

Xi; R36

N; R51/53

Classification information

Classification and labelling are based on toxicological studies performed on the product (mixture).

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms



GHS07



GHS09

Signal word

Warning

Hazard statements

H317

H319

H411

Hazard statements (EU)

EUH401

May cause an allergic skin reaction.

Causes serious eye irritation.

Toxic to aquatic life with long lasting effects.

To avoid risks to human health and the environment, comply with the instructions for use.



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Precautionary statements

P102 Keep out of reach of children.
 P270 Do not eat, drink or smoke when using this product.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P391 Collect spillage.
 P501 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.

2.3 Other hazards

PBT assessment
 No data available.
 vPvB assessment
 No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name	Classification 67/548/EEC	Classification (EC) 1272/2008 (CLP)	Additional information Concentration	%
1	N-(phosphonomethyl)glycine, compound with 2-propylamine (1:1)				
	38641-94-0 254-056-8 015-184-00-8 -	N; R51/53	Aquatic Chronic 2; H411	> 30.00 - < 50.00	%-b.w.
2	Fatty amine ethoxylate				
	61791-26-2 500-153-8 - -	Xn; R22 Xi; R41 N; R50	Acute Tox. 4; H302 Eye Dam. 1; H318 Aquatic Acute 1; H400	> 10.00 - < 30.00	%-b.w.

Full Text for all R-phrases , H-phrases and EUH-phrases: pls. see section 16

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	A	-	-	-

Full text for the notes: pls. see section 16 "Notes relating to the identification, classification and labelling of substances ((EC) No 1272/2008, Annex VI)".

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air. Call a doctor immediately.

After skin contact

Wash off immediately with soap and water. Seek medical attention.

After eye contact

Remove contact lenses, irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart and seek medical advice.

After ingestion

Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor immediately.



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4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide; Extinguishing powder; Water spray jet; Foam

Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon monoxide and carbon dioxide; Nitrogen oxides (NOx); Phosphorus oxides

5.3 Advice for firefighters

Use self-contained breathing apparatus. Adapt extinguisher and fire-fighting measures to fire in the environment. Wear protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Avoid contact with skin, eyes and clothing. Refer to protective measures listed in sections 7 and 8.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. kieselguhr). When picked up, treat material as prescribed under heading "Disposal considerations".

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation, if necessary). Avoid eye, skin and clothing contact.

General protective and hygiene measures

Wash hands before breaks and after work. Do not eat, drink or smoke during work time. Remove soiled or soaked clothing immediately. Keep away from food, drink and animal feeding stuffs. Avoid contact with eyes and skin. Provide eye wash fountain in work area.

Advice on protection against fire and explosion

Take precautionary measures against static charges. Keep away from sources of heat and ignition.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight.

Recommended storage temperature

Value -5 - 45 °C

Storage stability

Value 2 year(s)

Requirements for storage rooms and vessels

Keep only in the original container. Containers which are opened must be carefully closed and kept upright to prevent leakage.

Advice on storage assembly

Do not store together with: explosive substances; strong oxidizing agents

7.3 Specific end use(s)

No data available.



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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

No parameters available for monitoring.

8.2 Exposure controls

Appropriate engineering controls

No data available.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Safety glasses with side protection shield (EN 166)

Hand protection

Use protective gloves (DIN EN 374). Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other

Normal chemical work clothing.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form/Colour	
liquid	
yellow to orange	
Odour	
characteristic	
Odour threshold	
No data available	
pH value	
Value	4.9
Concentration	1 %
Source	Supplier



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Boiling point / boiling range			
No data available			
Melting point / melting range			
No data available			
Decomposition point / decomposition range			
No data available			
Flash point			
No data available			
Auto-ignition temperature			
No data available			
Oxidising properties			
No data available			
Explosive properties			
No data available			
Flammability (solid, gas)			
No data available			
Lower flammability or explosive limits			
No data available			
Upper flammability or explosive limits			
No data available			
Vapour pressure			
No data available			
Vapour density			
No data available			
Evaporation rate			
No data available			
Relative density			
Value		1.17	
Source		Supplier	
Density			
No data available			
Solubility in water			
Source		Supplier	
Remarks		miscible	
Solubility(ies)			
No data available			
Partition coefficient: n-octanol/water			
No	Substance name	CAS no.	EC no.
1	N-(phosphonomethyl)glycine, compound with 2-propylamine (1:1)	38641-94-0	254-056-8
log Pow		-5.4	
Source		Toxnet	
Viscosity			
Value		41.7	mPa*s
Reference temperature		20	°C
Type		dynamic	
Source		Supplier	
Value		17.4	mPa*s
Reference temperature		40	°C
Type		dynamic	
Source		Supplier	

9.2 Other information

Other information
No data available.



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SECTION 10: Stability and reactivity

- 10.1 Reactivity**
No data available.
- 10.2 Chemical stability**
Stable under recommended storage and handling conditions (See section 7).
- 10.3 Possibility of hazardous reactions**
No data available.
- 10.4 Conditions to avoid**
Heat, naked flames and other ignition sources.
- 10.5 Incompatible materials**
strong oxidizing agents
- 10.6 Hazardous decomposition products**
None, if handled according to intended use.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity			
No	Product Name		
1	VIVAL (Glyphosate 360 g/l)		
LD50	>	5000	mg/kg
Species	rat		

Acute dermal toxicity			
No	Product Name		
1	VIVAL (Glyphosate 360 g/l)		
LD50	>	2000	mg/kg
Species	rat		

Acute inhalational toxicity			
No	Substance name	CAS no.	EC no.
1	N-(phosphonomethyl)glycine, compound with 2-propylamine (1:1)	38641-94-0	254-056-8
LC50	>	1.3	mg/l
Duration of exposure		4	h
State of aggregation	Dust		
Species	rat		
Source	Toxnet		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Skin corrosion/irritation	
No data available	

Serious eye damage/irritation	
No	Product Name
1	VIVAL (Glyphosate 360 g/l)
Species	rabbit
Method	OECD 405
Evaluation	irritant

Respiratory or skin sensitisation	
No	Product Name
1	VIVAL (Glyphosate 360 g/l)
Route of exposure	Skin
Species	guinea pig
Method	OECD 406
Evaluation	sensitizing



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Germ cell mutagenicity
No data available
Reproduction toxicity
No data available
Carcinogenicity
No data available
STOT-single exposure
No data available
STOT-repeated exposure
No data available
Aspiration hazard
No data available

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)			
No	Substance name	CAS no.	EC no.
1	N-(phosphonomethyl)glycine, compound with 2-propylamine (1:1)	38641-94-0	254-056-8
LC50		2.3	mg/l
Duration of exposure		96	h
Species	Pimephales promelas		
Source	Toxnet		

Toxicity to fish (chronic)
No data available

Toxicity to Daphnia (acute)			
No	Substance name	CAS no.	EC no.
1	N-(phosphonomethyl)glycine, compound with 2-propylamine (1:1)	38641-94-0	254-056-8
EC50		3.0	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Source	Toxnet		

Toxicity to Daphnia (chronic)
No data available

Toxicity to algae (acute)
No data available

Toxicity to algae (chronic)
No data available

Bacteria toxicity
No data available

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water			
No	Substance name	CAS no.	EC no.
1	N-(phosphonomethyl)glycine, compound with 2-propylamine (1:1)	38641-94-0	254-056-8
log Pow		-5.4	
Source	Toxnet		

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	No data available.
vPvB assessment	No data available.



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12.6 Other adverse effects

No data available.

12.7 Other information

Other information

Do not discharge into the drains or waters and do not store on public depositories.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

Class	9
Classification code	M6
Packing group	III
Hazard identification no.	90
UN number	UN3082
Technical name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Danger releasing substance	N-(phosphonomethyl)glycine, compound with 2-propylamine (1:1)
Tunnel restriction code	E
Label	9
Environmentally hazardous substance mark	Symbol "fish and tree"

14.2 Transport IMDG

Class	9
Packing group	III
UN number	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Danger releasing substance	N-(phosphonomethyl)glycine, compound with 2-propylamine (1:1)
EmS	F-A+S-F
Label	9
Marine pollutant mark	Symbol "fish and tree"

14.3 Transport ICAO-TI / IATA

Class	9
Packing group	III
UN number	UN3082
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Danger releasing substance	N-(phosphonomethyl)glycine, compound with 2-propylamine (1:1)
Label	9
Environmentally hazardous substance mark	Symbol "fish and tree"

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

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

Not relevant



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SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances

Remarks Annex I, part 2, category 9 b

15.2 Chemical safety assessment

For this mixture a chemical safety assessment has not been carried out.

SECTION 16: Other information

Further information

ID 649565

Sources of key data used to compile the data sheet:

EC Directive 67/548/EC resp. 1999/45/EC as amended in each case.

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Full text of the R-, H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

R22	Harmful if swallowed.
R36	Irritating to eyes.
R41	Risk of serious damage to eyes.
R43	May cause sensitisation by skin contact.
R50	Very toxic to aquatic organisms.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
H302	Harmful if swallowed.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.

Notes relating to the identification, classification and labelling of substances and mixtures ((EC) No 1272/2008, Annex VI)

A Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as '... compounds' or '... salts'. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4.

Department issuing safety data sheet

UMCO Umwelt Consult GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 183, Tel.: +49(40)79 02 36 300, Fax: +49(40)79 02 36 357, e-mail: umco@umco.de

This information is based on our present state of knowledge and experience.

The security data sheet describes products with a view to the security requirements.

However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.