

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



TITUS

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	08.04.2024	800080000886	Date of first issue: 08.04.2024

Corteva Agriscience™ encourages you and expects you to read and understand the entire SDS as there is important information throughout the document. This SDS provides users with information relating to the protection of human health and safety at the workplace, protection of the environment and supports emergency response. Product users and applicators should primarily refer to the product label attached to or accompanying the product container. This Safety Data Sheet adheres to the standards and regulatory requirements of Ireland and may not meet the regulatory requirements in other countries.

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

1.1 Product identifier

Trade name : TITUS

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

Use of the Sub-stance/Mixture : Herbicide

1.3 Details of the supplier of the safety data sheet

COMPANY IDENTIFICATION

Manufacturer/importer

Corteva Agriscience UK Limited
Melbourn Science Park - Cambridge Road - Unit H4, Building H
Melbourn Cambridgeshire - SG8 6HB
UNITED KINGDOM

Customer Information : +44 8006 89 8899

Number

E-mail address : SDS@corteva.com

1.4 Emergency telephone number

SGS : +353 818 663 627

National Poisons Information Centre (Beaumont Hospital): 01 809 2166 (8 AM - 10 PM)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Short-term (acute) aquatic hazard, Category 1 H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, Cat- H410: Very toxic to aquatic life with long lasting

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Category 1 effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : **Response:**
P391 Collect spillage.

Disposal:

P501 Dispose of contents/container to a licensed waste disposal contractor or collection site except for empty clean triple rinsed containers which can be disposed of as non-hazardous waste.

Additional Labelling

EUH208 Contains Rimsulfuron. May produce an allergic reaction.

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No.	Classification	Concentration (% w/w)
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	Index-No. REACH Registration number		
Rimsulfuron	122931-48-0	Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	25
Alkyl-naphthalenesulfonic acid, polymer with formaldehyde, sodium salt	68425-94-5	Eye Irrit. 2; H319	>= 10 - < 20

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Never give anything by mouth to an unconscious person.
For specialist advice contact the National Poisons Information Service. Healthcare Professionals: (01) 809 2566 or (01) 837 9964 (24h per day –365 days per year). Public Poisons Information Line: (01) 809 2166(8am-10pm).
- If inhaled : Move to fresh air.
Consult a physician after significant exposure.
Artificial respiration and/or oxygen may be necessary.
- In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off immediately with soap and plenty of water.
In the case of skin irritation or allergic reactions see a physician.
Wash contaminated clothing before re-use.
- In case of eye contact : If easy to do, remove contact lens, if worn.
Hold eye open and rinse slowly and gently with water for 15-20 minutes.
If eye irritation persists, consult a specialist.
- If swallowed : Obtain medical attention.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
If victim is conscious:
Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No cases of human intoxication are known and the symptoms of experimental intoxication are not known.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray
Alcohol-resistant foam

Unsuitable extinguishing media : Dry chemical

High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Exposure to combustion products may be a hazard to health. Applying foam will release significant amounts of hydrogen gas that can be trapped under the foam blanket.

Hazardous combustion products : Nitrogen oxides (NO_x)
Carbon oxides

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.

Specific extinguishing methods : Do not allow extinguishing medium to contact container contents. Most fire extinguishing media will cause hydrogen evolution, and once the fire is put out, may accumulate in poorly ventilated or confined areas and result in flash fire or explosion if ignited.
Remove undamaged containers from fire area if it is safe to do so.
Evacuate area.
Use water spray to cool unopened containers.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Avoid dust formation.
Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

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6.2 Environmental precautions

Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.
Discharge into the environment must be avoided.
Prevent further leakage or spillage if safe to do so.
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in.
Pick up and arrange disposal without creating dust.
Recovered material should be stored in a vented container.
The vent must prevent the ingress of water as further reaction with spilled materials can take place which could lead to over-pressurization of the container.
Sweep up and shovel.
Keep in suitable, closed containers for disposal.
Sweep up or vacuum up spillage and collect in suitable container for disposal.
See Section 13, Disposal Considerations, for additional information.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice.
Smoking, eating and drinking should be prohibited in the application area.
Take care to prevent spills, waste and minimize release to the environment.
Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing. Keep working clothes separately. Contaminated work clothing should not be allowed out of the workplace. Wash hands and face before breaks and immediately after handling the product. When using do not eat, drink or smoke. Keep away from food, drink and animal feedingstuffs. For environmental protection remove and wash all contaminated protective equipment before re-use. Remove clothing/PPE immediately if material gets inside. Wash thoroughly and put on clean clothing. Dispose of rinse water in accordance with local and

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national regulations.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in a closed container. Keep in properly labelled containers. Store in accordance with the particular national regulations.

Advice on common storage : Strong oxidizing agents

Packaging material : Unsuitable material: None known.

7.3 Specific end use(s)

Specific use(s) : Plant protection products subject to Regulation (EC) No 1107/2009.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Disodium hydrogen phosphate	Workers	Inhalation	Long-term systemic effects	4.07 mg/m ³
	Consumers	Inhalation	Long-term systemic effects	3.04 mg/m ³
Potassium dihydrogen phosphate (KH ₂ PO ₄)	Workers	Inhalation	Acute local effects	4.07 mg/m ³
	Consumers	Inhalation	Long-term systemic effects	3.04 mg/m ³

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Disodium hydrogen phosphate	Fresh water	0.05 mg/l
	Marine water	0.005 mg/l
	Intermittent use/release	0.5 mg/l
	Sewage treatment plant	50 mg/l
Potassium dihydrogen phosphate (KH ₂ PO ₄)	Fresh water	0.05 mg/l
	Marine water	0.005 mg/l
	Intermittent use/release	0.5 mg/l
	Sewage treatment plant	50 mg/l

8.2 Exposure controls

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Use sufficient ventilation to keep employee exposure below recommended limits.

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Personal protective equipment

Eye/face protection : Safety glasses with side-shields conforming to EN166

Hand protection

Remarks : The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective gloves. Gloves must be inspected prior to use. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Gauntlets shorter than 35 cm long shall be worn under the combination sleeve. Before removing gloves clean them with soap and water.

Skin and body protection : Full protective clothing Type 4 (EN 14605)

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls

Chemical resistant gloves made of any waterproof material

Shoes plus socks

Respiratory protection : Manufacturing and processing work:
Half mask with a particle filter FFP1 (EN149)

Mixer and loaders must wear:

Half mask with a particle filter FFP1 (EN149)

Spray application - outdoor:

Tractor / sprayer with hood:

No personal respiratory protective equipment normally required.

Tractor / sprayer without hood:

Low application:

Half mask with a particle filter FFP1 (EN149)

Backpack / knapsack sprayer:

Low application:

Half mask with a particle filter FFP1 (EN149)

Mechanical automatized spray application in closed tunnel:

No personal respiratory protective equipment normally required.

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Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
All chemical protective clothing should be visually inspected prior to use. Clothing and gloves should be replaced in case of chemical or physical damage or if contaminated.
Only protected handlers may be in the area during application.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: solid
Colour	: beige
Odour	: very faint
Odour Threshold	: not determined
Melting point/freezing point	: No data available
Boiling point/boiling range	: Not applicable
Flammability	: The product is not flammable.
Upper explosion limit / Upper flammability limit	: No data available
Lower explosion limit / Lower flammability limit	: 0.15 vol %
Flash point	: Not applicable
Auto-ignition temperature	: 380 °C
pH	: 7 (25 °C) Concentration: 10 g/L
Viscosity	

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Viscosity, kinematic : Not applicable

Solubility(ies)
Water solubility : dispersible

Partition coefficient: n-octanol/water : Not applicable

Vapour pressure : No data available

Relative density : No data available

Bulk density : 784 kg/m³

Relative vapour density : Not applicable

9.2 Other information

Explosives : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Self-ignition : 380 °C

Evaporation rate : Not applicable

Surface tension : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Not classified as a reactivity hazard.

10.2 Chemical stability

No decomposition if stored and applied as directed.
Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.

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No hazards to be specially mentioned.
None known.

10.4 Conditions to avoid

Conditions to avoid : Do not expose to temperatures above: 100 °C

10.5 Incompatible materials

Materials to avoid : Strong acids
Strong bases

10.6 Hazardous decomposition products

Carbon oxides

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 401
Remarks: Information source: Internal study report

Acute inhalation toxicity : LC50 (Rat): > 7.5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Information source: Internal study report

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Method: OECD Test Guideline 402
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Information source: Internal study report

Components:

Rimsulfuron:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: Directive 67/548/EEC, Annex V, B.1.

Acute inhalation toxicity : LC50 (Rat): > 205.4 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

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Method: Directive 67/548/EEC, Annex V, B.2.
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Method: Directive 67/548/EEC, Annex V, B.3.
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute dermal toxicity

Alkyl-naphthalenesulfonic acid, polymer with formaldehyde, sodium salt:

Acute oral toxicity : LD50 (Rat): > 4,500 mg/kg

Skin corrosion/irritation

Product:

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation
Remarks : Information source: Internal study report

Components:

Rimsulfuron:

Species : Rabbit
Method : Directive 67/548/EEC, Annex V, B.4.
Result : No skin irritation

Alkyl-naphthalenesulfonic acid, polymer with formaldehyde, sodium salt:

Species : Rabbit
Result : No skin irritation

Serious eye damage/eye irritation

Product:

Species : Rabbit
Method : OECD Test Guideline 405
Result : No eye irritation
Remarks : Information source: Internal study report

Components:

Rimsulfuron:

Species : Rabbit
Method : Directive 67/548/EEC, Annex V, B.5.
Result : No eye irritation

Alkyl-naphthalenesulfonic acid, polymer with formaldehyde, sodium salt:

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Species : Rabbit
Result : Eye irritation

Respiratory or skin sensitisation

Product:

Test Type : Maximisation Test
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitisation.
Remarks : Information source: Internal study report

Components:

Rimsulfuron:

Test Type : Human Cell Line Activation Test (h-CLAT)
Species : Not tested on animals
Result : May cause sensitisation by skin contact.

Germ cell mutagenicity

Components:

Rimsulfuron:

Germ cell mutagenicity- Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects., Animal testing did not show any mutagenic effects.

Carcinogenicity

Components:

Rimsulfuron:

Carcinogenicity - Assessment : Did not cause cancer in laboratory animals.

Reproductive toxicity

Components:

Rimsulfuron:

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction. Development effects were not observed in laboratory animals.

STOT - single exposure

Product:

Assessment : Available data are inadequate to determine single exposure specific target organ toxicity.

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Components:

Rimsulfuron:

Assessment : Available data are inadequate to determine single exposure specific target organ toxicity.

Alkyl-naphthalenesulfonic acid, polymer with formaldehyde, sodium salt:

Assessment : Available data are inadequate to determine single exposure specific target organ toxicity.

STOT - repeated exposure

Product:

Assessment : Evaluation of available data suggests that this material is not an STOT-RE toxicant.

Repeated dose toxicity

Components:

Rimsulfuron:

Remarks : In animals, effects have been reported on the following organs:
Liver

Aspiration toxicity

Product:

Based on physical properties, not likely to be an aspiration hazard.

Components:

Rimsulfuron:

Based on physical properties, not likely to be an aspiration hazard.

Alkyl-naphthalenesulfonic acid, polymer with formaldehyde, sodium salt:

Based on physical properties, not likely to be an aspiration hazard.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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SECTION 12: Ecological information

12.1 Toxicity

Product:

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 1,000 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
GLP: yes
- LC50 (Lepomis macrochirus (Bluegill sunfish)): > 1,000 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
GLP: yes
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1.000 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
GLP: yes
- Toxicity to algae/aquatic plants : EC50 (Lemna gibba (duckweed)): 0.0315 mg/l
End point: Frond
Exposure time: 14 d
Method: US EPA Test Guideline OPP 122-2 & 123-2
GLP: yes
- NOEC (Lemna gibba (duckweed)): 0.02 mg/l
End point: Frond
Exposure time: 14 d
Method: US EPA Test Guideline OPP 122-2 & 123-2
GLP: yes
- EC50 (Lemna gibba (duckweed)): 0.0551 mg/l
End point: Biomass
Exposure time: 14 d
Method: US EPA Test Guideline OPP 122-2 & 123-2
GLP: yes
- ErC50 (Pseudokirchneriella subcapitata (microalgae)): 4.565 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 221
GLP: yes
- ErC50 (Anabaena flos-aquae (cyanobacteria)): 4.0 mg/l
Exposure time: 96 h
GLP: yes
- NOEC (Lemna gibba (duckweed)): 0.02 mg/l

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Exposure time: 7 d
Method: US EPA Test Guideline OPP 122-2 & 123-2
GLP: yes

ErC50 (Pseudokirchneriella subcapitata (microalgae)): 1.5 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 221
GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 26 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)

Toxicity to soil dwelling organisms : LC50: > 1,000 mg/kg
Exposure time: 14 d
Species: Eisenia fetida (earthworms)
Method: OECD Test Guideline 207

Toxicity to terrestrial organisms : LD50: > 2.250 mg/kg
Species: Colinus virginianus (Bobwhite quail)
Method: US EPA Test Guideline OPP 71-1

oral LD50: > 2,250 mg/kg
Species: Anas platyrhynchos (Mallard duck)
Method: US EPA Test Guideline OPP 71-1
Remarks: Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg).

LC50: > 5.620 mg/kg
Exposure time: 8 d
Species: Colinus virginianus (Bobwhite quail)
Method: US EPA Test Guideline OPP 71-2

dietary LC50: > 5.620 mg/kg
Exposure time: 8 d
Species: Anas platyrhynchos (Mallard duck)
Method: US EPA Test Guideline OPP 71-2
Remarks: Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg).

oral LD50: 41.1 µg/bee
Exposure time: 48 h
Species: Apis mellifera (bees)
Method: OECD Test Guideline 213
GLP:yes

contact LD50: 17.8 µg/bee
Exposure time: 48 d
Species: Apis mellifera (bees)
Method: OECD Test Guideline 214
GLP:yes

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Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Components:

Rimsulfuron:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 390 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): > 360 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae/aquatic plants : EbC50 (Pseudokirchneriella subcapitata (green algae)): 1.2 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
GLP: yes

ErC50 (Pseudokirchneriella subcapitata (green algae)): 2.8 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 201
GLP: yes

EC50 (Lemna gibba (duckweed)): 0.023 mg/l
End point: Frond
Exposure time: 14 d
Method: US EPA Test Guideline OPP 122-2 & 123-2
GLP: yes

EC50 (Lemna gibba (duckweed)): 0.017 mg/l
End point: Biomass
Exposure time: 14 d
Method: US EPA Test Guideline OPP 122-2 & 123-2
GLP: yes

ErC50 (Anabaena flos-aquae (cyanobacteria)): 5.2 mg/l
Exposure time: 96 h
Method: US EPA Test Guideline OPPTS 850.5400
GLP: yes

Toxicity to fish (Chronic toxicity) : NOEC: 110 mg/l
Exposure time: 90 d
Species: Oncorhynchus mykiss (rainbow trout)
Test Type: Early Life-Stage
Method: OECD Test Guideline 210
GLP: yes

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- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.82 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 202
GLP: yes
- Toxicity to soil dwelling organisms : LC50: 1,000 mg/kg
Species: Eisenia fetida (earthworms)
Method: OECD Test Guideline 207
GLP:yes
- Toxicity to terrestrial organisms : oral LD50: > 2,250 mg/kg
Species: Colinus virginianus (Bobwhite quail)
Method: US EPA Test Guideline OPP 71-1
GLP:yes
- oral LD50: > 2,000 mg/kg
Species: Anas platyrhynchos (Mallard duck)
Method: US EPA Test Guideline OPP 71-1
GLP:yes
- dietary LC50: > 5,620 mg/kg
Exposure time: 8 d
Species: Colinus virginianus (Bobwhite quail)
Method: OECD Test Guideline 205
- dietary LC50: > 5,620 mg/kg
Exposure time: 8 d
Species: Anas platyrhynchos (Mallard duck)
Method: OECD Test Guideline 205
- contact LD50: 1,000 ppm
Species: Apis mellifera (bees)
Method: OEPP/EPPO Test Guideline 170
GLP:yes
- oral LD50: 1,000 ppm
Species: Apis mellifera (bees)
Method: OEPP/EPPO Test Guideline 170

Ecotoxicology Assessment

- Acute aquatic toxicity : Very toxic to aquatic life.
- Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Product:

- Biodegradability : Remarks: Not readily biodegradable.
Estimation based on data obtained on active ingredient.

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Components:

Rimsulfuron:

Biodegradability : Result: Not readily biodegradable.

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Does not bioaccumulate.
Estimation based on data obtained on active ingredient.

Components:

Rimsulfuron:

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n-octanol/water : Remarks: No relevant data found.

Alkyl-naphthalenesulfonic acid, polymer with formaldehyde, sodium salt:

Partition coefficient: n-octanol/water : Remarks: No data available for this product.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Components:

Rimsulfuron:

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Alkyl-naphthalenesulfonic acid, polymer with formaldehyde, sodium salt:

Assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components consid-

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ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Components:

Rimsulfuron:

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Alkyl-naphthalenesulfonic acid, polymer with formaldehyde, sodium salt:

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.
If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

SECTION 14: Transport information

14.1 UN number or ID number

ADR : UN 3077
RID : UN 3077
IMDG : UN 3077
IATA : UN 3077

14.2 UN proper shipping name

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Rimsulfuron)

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RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Rimsulfuron)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Rimsulfuron)

IATA : Environmentally hazardous substance, solid, n.o.s.
(Rimsulfuron)

14.3 Transport hazard class(es)

	Class	Subsidiary risks
ADR	: 9	
RID	: 9	
IMDG	: 9	
IATA	: 9	

14.4 Packing group

ADR
Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9
Tunnel restriction code : (-)

RID
Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9

IMDG
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Remarks : Stowage category A

IATA (Cargo)
Packing instruction (cargo aircraft) : 956
Packing instruction (LQ) : Y956
Packing group : III
Labels : Miscellaneous

IATA (Passenger)
Packing instruction (passenger aircraft) : 956
Packing instruction (LQ) : Y956
Packing group : III
Labels : Miscellaneous

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14.5 Environmental hazards

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

IMDG

Marine pollutant : yes(Rimsulfuron)

14.6 Special precautions for user

Marine Pollutants assigned UN number 3077 and 3082 in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code, IATA Special provision A197, and ADR/RID special provision 375.

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Seveso III: Directive 2012/18/EU of the Euro- E1 ENVIRONMENTAL HAZARDS

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pean Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

The mixture is evaluated within the frame of the provisions of Regulation (EC) No. 1107/2009.

Refer to the label for exposure assessment information.

SECTION 16: Other information

Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

Full text of H-Statements

H317 : May cause an allergic skin reaction.
H319 : Causes serious eye irritation.
H400 : Very toxic to aquatic life.
H410 : Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Acute : Short-term (acute) aquatic hazard
Aquatic Chronic : Long-term (chronic) aquatic hazard
Eye Irrit. : Eye irritation
Skin Sens. : Skin sensitisation

ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; ASTM - American Society for the Testing of Materials; ECx - Concentration associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - not otherwise specified; NOEC - Non-Observed Effective Concentration; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; (Q)SAR - (Quantitative) Structure Activity Relationship; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SDS - Safety Data Sheet; UN - United Nations.

EC-Number - European Community number REACH - Regulation (EC) No 1907/2006 of the European Parliament and of Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.

Further information

Other information : Take notice of the directions of use on the label.

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Classification of the mixture:

Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Classification procedure:

Based on product data or assessment
Based on product data or assessment

Product code: GF-3961

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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