

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

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

1.1 Product identifier

Product name Spotlight® Plus

Other means of identification

Product code 50000505

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

Use of the Sub- stance/Mixture	Herbicide
Recommended restrictions on use	Use as recommended by the label.

1.3 Details of the supplier of the safety data sheet

Supplier Address

FMC Agro Bulgaria EOOD
ISKARSKO SHOSE BLVD. NO.7
TRADE CENTER EUROPE
BUILDING 7, OFFICE 8, FLOOR 4
1528 SOFIA
BULGARIA

Telephone: +359 (0) 2 818 5656
E-mail address: SDS-Info@fmc.com (E-Mail General Infor-
mation)

1.4 Emergency telephone number

For leak, fire, spill or accident emergencies, call:
Bulgaria: +(359)-32570104 (CHEMTREC)

Medical emergency:
Clinic of Toxicology at the Hospital " N.I. Pirogov"
Emergency telephone/fax: +359 2 9154 233

National number: 112

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006





Spotlight® Plus

Version 1.0	Revision Date: 04.05.2022	SDS Number: 50000505	Date of last issue: - Date of first issue: 04.05.2022
----------------	------------------------------	-------------------------	--

Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 1	H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :  

Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P261 Avoid breathing mist or vapours.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of water and soap.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
Disposal:
P501 Dispose of contents/container in accordance with local regulation.

Additional Labelling

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.

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version 1.0 Revision Date: 04.05.2022 SDS Number: 50000505 Date of last issue: -
Date of first issue: 04.05.2022

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. Index-No. Registration number	Classification	Concentration (% w/w)
carfentrazone-ethyl (ISO)	128639-02-1 607-309-00-5	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 100	>= 2,5 - < 10
Oxirane, methyl-, polymer with oxirane, mono[3-[1,3,3,3- tetramethyl-1- [(trimethylsi- lyl)oxy]disiloxanyl]propyl] ether	134180-76-0	Acute Tox. 4; H332 Acute Tox. 4; H312 Eye Irrit. 2; H319 Aquatic Chronic 2; H411	>= 2,5 - < 10
Benzenesulfonic acid, mono-C11- 13-branched alkyl derivs., calcium salts	68953-96-8 273-234-6	Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 2; H411	>= 1 - < 2,5

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : If unconscious, place in recovery position and seek medical
advice.
If symptoms persist, call a physician.
- In case of skin contact : If on skin, rinse well with water.
- In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Risks : May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Dry chemical, CO₂, water spray or regular foam.

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

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

Hazardous combustion products : Nitrogen oxides (NO_x)
Carbon oxides
Chlorine compounds
Fluorine compounds

5.3 Advice for firefighters

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

Further information : 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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform
respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,
acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

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 : Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the ap-
plication area.
Dispose of rinse water in accordance with local and national
regulations.
Persons susceptible to skin sensitisation problems or asthma,
allergies, chronic or recurrent respiratory disease should not
be employed in any process in which this mixture is being
used.

Advice on protection against : Normal measures for preventive fire protection.
fire and explosion

Hygiene measures : When using do not eat or drink. When using do not smoke.
Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage : Keep container tightly closed in a dry and well-ventilated
areas and containers place. Containers which are opened must be carefully re-
sealed and kept upright to prevent leakage. Electrical installa-
tions / working materials must comply with the technological
safety standards.

Advice on common storage : Do not store near acids.

Further information on stor- : No decomposition if stored and applied as directed.
age stability

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version 1.0 Revision Date: 04.05.2022 SDS Number: 50000505 Date of last issue: -
Date of first issue: 04.05.2022

7.3 Specific end use(s)

Specific use(s) : Registered pesticide to be used in accordance with a label approved by country-specific regulatory authorities.

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
Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts	Workers	Inhalation	Long-term systemic effects	6 mg/m3
	Workers	Dermal	Long-term systemic effects	8,5 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	1,48 mg/m3
	Consumers	Dermal	Long-term systemic effects	4,25 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	0,43 mg/kg bw/day

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

Substance name	Environmental Compartment	Value
2-ethylhexyl oleate	Fresh water sediment	1,44 mg/kg dry weight (d.w.)
	Marine sediment	1,44 mg/kg dry weight (d.w.)
	Soil	20 mg/kg dry weight (d.w.)
Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts	Fresh water	0,023 mg/l
	Marine water	0,002 mg/l
	Sewage treatment plant	5,5 mg/l
	Fresh water sediment	1,35 mg/kg
	Marine sediment	0,135 mg/kg
	Soil	0,124 mg/kg
	Intermittent use (freshwater)	0,290 mg/l

8.2 Exposure controls

Personal protective equipment

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles

Hand protection
Material : Wear chemical resistant gloves, such as barrier laminate,

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

butyl rubber or nitrile rubber.

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : No personal respiratory protective equipment normally required.
In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Protective measures : Plan first aid action before beginning work with this product.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: liquid
Colour	: yellow-orange
Odour	: oily
Odour Threshold	: not determined
Melting point/freezing point	: not determined
Boiling point/boiling range	: not determined
Upper explosion limit / Upper flammability limit	: not determined
Lower explosion limit / Lower flammability limit	: not determined
Flash point	: 111 °C
Decomposition temperature	: not determined
pH	: 4,86 In a 1% aqueous dispersion
Viscosity	
Viscosity, dynamic	: not determined
Viscosity, kinematic	: 20,42 mm ² /s (40 °C)
Solubility(ies)	
Water solubility	: dispersible

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

Partition coefficient: n-octanol/water : Not available for this mixture.

Vapour pressure : Not available for this mixture.

Relative density : 0,9308 (20 °C)

Relative vapour density : not determined

9.2 Other information

Explosives : Not explosive

Oxidizing properties : Non-oxidizing

Self-ignition : 356 °C

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Strong acids and strong bases
Strong oxidizing agents

10.6 Hazardous decomposition products

Stable under recommended storage conditions.

SECTION 11: Toxicological information

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

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

Acute inhalation toxicity : LC50 (Rat): > 5,11 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg

Components:

carfentrazone-ethyl (ISO):

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Method: FIFRA 81.01

Acute inhalation toxicity : LC50 (Rat): > 5,09 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat): > 4.000 mg/kg
Method: US EPA Test Guideline OPP 81-2
Assessment: The substance or mixture has no acute dermal toxicity

Oxirane, methyl-, polymer with oxirane, mono[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propyl] ether:

Acute oral toxicity : LD50 (Rat): 3.200 mg/kg

Acute inhalation toxicity : LC50 (Rat): 1,08 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit): 1.550 mg/kg
LD50 (Rat): > 2.000 mg/kg

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Acute oral toxicity : LD0 (Rat, male and female): > 2.000 mg/kg
Method: OECD Test Guideline 401
Remarks: no mortality

Acute dermal toxicity : LD50 (Rat, male and female): > 1.000 - 1.600 mg/kg
Method: OECD Test Guideline 402

Skin corrosion/irritation

Not classified based on available information.

Product:

Species : Rabbit

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

Result : No skin irritation

Components:

carfentrazone-ethyl (ISO):

Species	: Rabbit
Method	: US EPA Test Guideline OPP 81-5
Result	: No skin irritation

Oxirane, methyl-, polymer with oxirane, mono[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propyl] ether:

Result : slight irritation

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Species	: Rabbit
Result	: Skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Species	: Rabbit
Assessment	: No eye irritation
Remarks	: May cause mild irritation. Not classified

Components:

carfentrazone-ethyl (ISO):

Species	: Rabbit
Method	: EPA OPP 81-4
Result	: slight irritation

Oxirane, methyl-, polymer with oxirane, mono[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propyl] ether:

Species	: Rabbit
Result	: Moderate eye irritation

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Species	: Rabbit
Result	: Irreversible effects on the eye

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

Respiratory sensitisation

Not classified based on available information.

Product:

Species	:	Guinea pig
Result	:	May cause sensitisation by skin contact.

Components:

carfentrazone-ethyl (ISO):

Species	:	Guinea pig
Method	:	US EPA Test Guideline OPP 81-6
Result	:	Does not cause skin sensitisation.

Oxirane, methyl-, polymer with oxirane, mono[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propyl] ether:

Species	:	Guinea pig
Result	:	Not a skin sensitizer.

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Test Type	:	Maximisation Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitisation.

Germ cell mutagenicity

Not classified based on available information.

Product:

Germ cell mutagenicity- Assessment	:	Weight of evidence does not support classification as a germ cell mutagen.
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Components:

carfentrazone-ethyl (ISO):

Germ cell mutagenicity- Assessment	:	No genotoxic potential
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Oxirane, methyl-, polymer with oxirane, mono[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propyl] ether:

Genotoxicity in vitro	:	Test Type: Chromosome aberration test in vitro Test system: Chinese hamster ovary cells Method: OECD Test Guideline 473 Result: negative
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Genotoxicity in vivo	:	Test Type: Micronucleus test Species: Mouse Cell type: Bone marrow Application Route: Intraperitoneal injection
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SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

Result: negative

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Genotoxicity in vitro	:	Test Type: In vitro mammalian cell gene mutation test Result: negative Remarks: Based on data from similar materials Test Type: reverse mutation assay Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay) Result: negative
Genotoxicity in vivo	:	Test Type: Micronucleus test Species: Mouse (male and female) Application Route: Oral Result: negative Remarks: Based on data from similar materials
Germ cell mutagenicity- Assessment	:	Weight of evidence does not support classification as a germ cell mutagen.

Carcinogenicity

Not classified based on available information.

Product:

Carcinogenicity - Assessment	:	Weight of evidence does not support classification as a carcinogen
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Components:

carfentrazone-ethyl (ISO):

Result	:	negative
Carcinogenicity - Assessment	:	Animal testing did not show any carcinogenic effects.

Reproductive toxicity

Not classified based on available information.

Product:

Reproductive toxicity - Assessment	:	Weight of evidence does not support classification for reproductive toxicity
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Components:

carfentrazone-ethyl (ISO):

Reproductive toxicity - Assessment	:	Animal testing showed no reproductive toxicity.
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Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version 1.0	Revision Date: 04.05.2022	SDS Number: 50000505	Date of last issue: - Date of first issue: 04.05.2022
----------------	------------------------------	-------------------------	--

- Effects on fertility : Test Type: Three-generation study
Species: Rat, male and female
Application Route: Oral
Dose: 14, 70, 350 mg/kg bw d
General Toxicity - Parent: NOAEL: 350 mg/kg body weight
General Toxicity F1: NOAEL: 350 mg/kg bw/day
General Toxicity F2: NOAEL: 350 mg/kg bw/day
Result: negative
Remarks: Based on data from similar materials
- Effects on foetal development : Test Type: reproductive and developmental toxicity study
Species: Rat
Application Route: Oral
Dose: 0.2, 2.0, 300 and 600 mg/kg
Duration of Single Treatment: 20 d
General Toxicity Maternal: LOAEL: 600 mg/kg body weight
Teratogenicity: LOAEL: 600 mg/kg bw/day
Result: negative
Remarks: Based on data from similar materials
- Reproductive toxicity - Assessment : Weight of evidence does not support classification for reproductive toxicity

STOT - single exposure

Not classified based on available information.

Product:

- Assessment : The substance or mixture is not classified as specific target organ toxicant, single exposure.

Components:

carfentrazone-ethyl (ISO):

- Remarks : No significant adverse effects were reported

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

- Assessment : The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Not classified based on available information.

Product:

- Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Components:

carfentrazone-ethyl (ISO):

- Assessment : The substance or mixture is not classified as specific target

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

carfentrazone-ethyl (ISO):

Species	: Rat
NOAEL	: 58 mg/kg
Application Route	: Oral
Exposure time	: 90 days

Oxirane, methyl-, polymer with oxirane, mono[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propyl] ether:

Species	: Rat
NOAEL	: 200 mg/kg
Application Route	: Oral
Exposure time	: 28 d
Method	: OECD Test Guideline 407

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Species	: Rat, male and female
NOAEL	: 40 mg/kg bw/day
LOAEL	: 115 mg/kg bw/day
Application Route	: Oral - feed
Exposure time	: 6 months
Dose	: 40, 115, 340, 1030 mg/kg bw d
Remarks	: Based on data from similar materials

Aspiration toxicity

Not classified based on available information.

Product:

The mixture does not have properties associated with aspiration hazard potential.

Components:

carfentrazone-ethyl (ISO):

The substance does not have properties associated with aspiration hazard potential.

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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SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

Neurological effects

Components:

carfentrazone-ethyl (ISO):

No neurotoxicity observed in animal studies

Further information

Product:

Remarks : No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to algae/aquatic plants : ErC50 (algae): 0,45 mg/l

NOEC (algae): 0,1 mg/l

Components:

carfentrazone-ethyl (ISO):

Toxicity to fish : LC50 (Fish): 1,6 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): > 9,8 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Anabaena flos-aquae (cyanobacterium)): 0,012 mg/l
Exposure time: 72 h

NOEC (algae): 0,001 mg/l
Exposure time: 96 h

EC50 (Lemna gibba (gibbous duckweed)): 0,0057 mg/l
Exposure time: 14 d

M-Factor (Acute aquatic toxicity) : 10

Toxicity to fish (Chronic toxicity) : NOEC: 0,0187 mg/l
Exposure time: 21 d
Species: Fish

Toxicity to daphnia and other aquatic invertebrates (Chronic) : NOEC: 0,22 mg/l
Exposure time: 21 d

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

ic toxicity) Species: Crustaceans

M-Factor (Chronic aquatic toxicity) : 100

Toxicity to soil dwelling organisms : LC50: > 820 mg/kg
Species: Eisenia fetida (earthworms)

Remarks: No significant adverse effect on nitrogen mineralization.
No significant adverse effect on carbon mineralization.

Toxicity to terrestrial organisms : LD50: > 5.620 ppm
End point: Acute oral toxicity
Species: Anas platyrhynchos (Mallard duck)

LD50: > 5.620 ppm
End point: Acute oral toxicity
Species: Colinus virginianus (Bobwhite quail)

LD50: > 200 µg/bee
End point: Acute oral toxicity
Species: Apis mellifera (bees)

LD50: > 200 µg/bee
End point: Acute contact toxicity
Species: Apis mellifera (bees)

Oxirane, methyl-, polymer with oxirane, mono[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propyl] ether:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2,1 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1,1 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Scenedesmus subspicatus): 28,2 mg/l
Exposure time: 72 h

EC50 (Scenedesmus subspicatus): 152,2 mg/l
Exposure time: 72 h

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 31,6 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 62 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version 1.0	Revision Date: 04.05.2022	SDS Number: 50000505	Date of last issue: - Date of first issue: 04.05.2022
----------------	------------------------------	-------------------------	--

- | | |
|--|--|
| Toxicity to algae/aquatic plants | : EC50 (Pseudokirchneriella subcapitata (green algae)): 29 mg/l
Exposure time: 96 h
Remarks: Based on data from similar materials

NOEC (Pseudokirchneriella subcapitata (green algae)): 0,5 mg/l
Exposure time: 96 h
Remarks: Based on data from similar materials |
| Toxicity to microorganisms | : EC50 (activated sludge): 550 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209 |
| Toxicity to fish (Chronic toxicity) | : NOEC: 0,23 mg/l
Exposure time: 72 d
Species: Oncorhynchus mykiss (rainbow trout)
Test Type: flow-through test
Remarks: Based on data from similar materials |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : NOEC: 1,18 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Test Type: flow-through test
Remarks: Based on data from similar materials |
| Toxicity to soil dwelling organisms | : NOEC: 250 mg/kg
Exposure time: 14 d
Species: Eisenia fetida (earthworms)
Method: OECD Test Guideline 207
Remarks: Based on data from similar materials

LC50: > 1.000 mg/kg
Exposure time: 14 d
Species: Eisenia fetida (earthworms)
Method: OECD Test Guideline 207
Remarks: Based on data from similar materials |
| Plant toxicity | : EC50: 167 mg/kg
Exposure time: 21 d
Species: Sorghum bicolor (sorghum)

80 mg/kg
Exposure time: 14 d
Species: Avena sativa (oats) |
| Toxicity to terrestrial organisms | : EC10: 82 mg/kg
Exposure time: 21 d
Species: Hypoaspis aculeifer
Remarks: Information given is based on data obtained from similar substances. |

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

12.2 Persistence and degradability

Product:

Biodegradability : Result: Not readily biodegradable.
Remarks: Estimation based on data obtained on active ingredient.
Product contains minor amounts of not readily biodegradable components, which may not be degradable in waste water treatment plants.

Components:

carfentrazone-ethyl (ISO):

Biodegradability : Result: Not readily biodegradable.

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Biodegradability : Inoculum: activated sludge, non-adapted
Result: Not readily biodegradable.
Biodegradation: 2,9 %
Exposure time: 28 d
Method: OECD Test Guideline 301E

Result: Inherently biodegradable.
Biodegradation: > 35 - 45 %
Exposure time: 10 d

12.3 Bioaccumulative potential

Product:

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

Components:

carfentrazone-ethyl (ISO):

Bioaccumulation : Species: Fish
Bioconcentration factor (BCF): 176
Remarks: See section 9 for octanol-water partition coefficient.

Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts:

Bioaccumulation : Bioconcentration factor (BCF): 3,16
Method: QSAR

Partition coefficient: n-octanol/water : log Pow: 4,595 (20 °C)

12.4 Mobility in soil

Product:

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

Distribution among environmental compartments : Remarks: Under normal conditions the substance/mixture is mobile in soil.
Estimation based on data obtained on active ingredient.

Components:

carfentrazone-ethyl (ISO):

Distribution among environmental compartments : Remarks: Mobile in soils

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.

12.6 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.

12.7 Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
Contaminated packaging	: Empty remaining contents. Do not re-use empty containers. Packaging that is not properly emptied must be disposed of as the unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

SECTION 14: Transport information

14.1 UN number or ID number

ADN	:	UN 3082
ADR	:	UN 3082
RID	:	UN 3082
IMDG	:	UN 3082
IATA	:	UN 3082

14.2 UN proper shipping name

ADN	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Carfentrazone-ethyl)
ADR	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Carfentrazone-ethyl)
RID	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Carfentrazone-ethyl)
IMDG	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Carfentrazone-ethyl)
IATA	:	Environmentally hazardous substance, liquid, n.o.s. (Carfentrazone-ethyl)

14.3 Transport hazard class(es)

ADN	:	9
ADR	:	9
RID	:	9
IMDG	:	9
IATA	:	9

14.4 Packing group

ADN		
Packing group	:	III
Classification Code	:	M6
Hazard Identification Number	:	90
Labels	:	9
ADR		
Packing group	:	III
Classification Code	:	M6
Hazard Identification Number	:	90

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

Labels : 9
Tunnel restriction code : (-)

RID

Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9

IMDG

Packing group : III
Labels : 9
EmS Code : F-A, S-F

IATA (Cargo)

Packing instruction (cargo aircraft) : 964
Packing instruction (LQ) : Y964
Packing group : III
Labels : Miscellaneous

IATA (Passenger)

Packing instruction (passenger aircraft) : 964
Packing instruction (LQ) : Y964
Packing group : III
Labels : Miscellaneous

14.5 Environmental hazards

ADN

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

IATA (Passenger)

Environmentally hazardous : yes

IATA (Cargo)

Environmentally hazardous : yes

14.6 Special precautions for user

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.

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

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)	:	Conditions of restriction for the following entries should be considered: Number on list 3
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 European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	E1	ENVIRONMENTAL HAZARDS
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Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

The components of this product are reported in the following inventories:

TCSI	:	Not in compliance with the inventory
TSCA	:	Product contains substance(s) not listed on TSCA inventory.
AIIC	:	Not in compliance with the inventory
DSL	:	This product contains the following components that are not on the Canadian DSL nor NDSL.

ETHYL (RS)-2-CHLORO-3-{2-CHLORO-5-[4-(DIFLUOROMETHYL)-4,5-DIHYDRO-3-METHYL-5-OXO-1H-1,2,4-TRIAZOL-1-YL]-4-FLUOROPHENYL}PROPIONATE

Polymeric surfactant
Aromatic hydrocarbons, C9; Alkylbenzenes; C9-aromatics

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

Oxirane, methyl-, polymer with oxirane, mono[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propyl] ether
2-ethylhexyl oleate

ENCS	: Not in compliance with the inventory
ISHL	: Not in compliance with the inventory
KECI	: Not in compliance with the inventory
PICCS	: Not in compliance with the inventory
IECSC	: Not in compliance with the inventory
NZIoC	: Not in compliance with the inventory
TECI	: Not in compliance with the inventory

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture.

SECTION 16: Other information

Full text of H-Statements

H312	: Harmful in contact with skin.
H315	: Causes skin irritation.
H318	: Causes serious eye damage.
H319	: Causes serious eye irritation.
H332	: Harmful if inhaled.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.
H411	: Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Acute	: Short-term (acute) aquatic hazard
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Eye Dam.	: Serious eye damage
Eye Irrit.	: Eye irritation
Skin Irrit.	: Skin irritation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration as-

SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022

sociated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; 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; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Other information : see user defined free text

Classification of the mixture:

Skin Sens. 1	H317
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Classification procedure:

Based on product data or assessment
Calculation method
Based on product data or assessment

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SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending
Regulation (EC) No 1907/2006



Spotlight® Plus

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	04.05.2022	50000505	Date of first issue: 04.05.2022
