

Safety data sheet
according to UK REACH

print: 09.07.2025

rev n°: 4 (replaces version 3)

Revision date: 09.07.2025

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name:** *BISMARK***kind of formulation:** *Microencapsulated product (CS)***Article number:** *not applicable***Registration number REACH:** *Not applicable.***UFI:** *YMSH-Y0VQ-YC0U-94VP***1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant use:** *Agriculture.**Herbicide**Agrochemicals formulation.***Product category PC27:** *Plant protection products***Application of the substance / the mixture***Agricultural chemicals**Plant protection product***1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:***SIPCAM OXON S.p.A.**Registered office: Via Carroccio, 8 - 20123 Milano, Italia**Management: Via Sempione, 195 - 20016 Pero (MI), Italia**Production site: Via Vittorio Veneto, 81 - 26857 Salerano s. Lambro (LO), Italia**Tel.: +39 0371 5961 (8:00 - 17:00 GMT+1)**Website: www.sipcam-oxon.com**E-mail: msds@sipcam.com***1.4 Emergency telephone number:***Emergency phone: +39 02 353781 (8.00-17.00 GMT+1)**For any questions regarding this MSDS please contact:**msds@sipcam.com**Refer to section 16 for Poison Centres.**UK National Poisons Information Service: 0121 507 4123***SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****2.1.1 Classification according to Regulation (EC) No 1272/2008****GHS08 health hazard***Repr. 2 H361d Suspected of damaging the unborn child.***GHS05 corrosion***Eye Dam. 1 H318 Causes serious eye damage.***GHS09 environment***Aquatic Acute 1 H400 Very toxic to aquatic life.**Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.***2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008***The product is classified and labelled according to the GB CLP regulation.***Hazard pictograms****GHS05****GHS08****GHS09**

(Contd. on page 2)

GB

Safety data sheet according to UK REACH

print: 09.07.2025

rev n°: 4 (replaces version 3)

Revision date: 09.07.2025

Trade name: BISMARK

(Contd. of page 1)

Signal word Danger**Hazard-determining components of labelling:**

Calcium Ammonium Nitrate

pendimethalin (ISO)

Hazard statements

H318 Causes serious eye damage.

H361d Suspected of damaging the unborn child.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P102 Keep out of reach of children.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P305+P351+P338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P308+P313 **IF exposed or concerned:** Get medical advice/attention.

P391 Collect spillage.

P405 Store locked up.

P501 Dispose of contents/container in accordance to national regulations.

Additional information:

EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

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

Product contains: Reportable explosives precursors. Making available, introduction, possession and use according to Regulation (EU) 2019/1148, Article 9.

2.3 Other hazards**Results of PBT and vPvB assessment****PBT:** The mixture does not contain any PBT substances.**vPvB:** The mixture does not contain any vPvB substances.

SECTION 3: Composition/information on ingredients

3.2 Mixtures**Description:** Mixture of the substances listed below with harmless additions:**Dangerous components:**

N° CAS	Designation	R-Phrases	%
CAS: 40487-42-1 EINECS: 254-938-2 Index number: 609-042-00-X	pendimethalin (ISO)	⚠ Repr. 2, H361d; ⚠ Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=10)	24.56%
CAS: 15245-12-2 EINECS: 239-289-5 Reg.nr.: 01-2119493947-16	Calcium Ammonium Nitrate	⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302	≥3-<10%
CAS: 81777-89-1 EC number: 617-258-0 Index number: 613-340-00-5	Clomazone	⚠ Acute Tox. 4, H302 ATE: LD50 oral: 768 mg/kg LC50 (4 h) inhalative: 4.85 mg/L	2.5-10%
CAS: 64742-94-5 EC number: 922-153-0 Reg.nr.: 01-2119451097-39-xxxx	Aromatic hydrocarbons C10-C13, naphtalene <1%	⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411	4.9%
CAS: 68512-34-5 EC number: 614-547-3	Lignosulfonic acid, sodium salt, sulfomethylated	⚠ Eye Irrit. 2, H319	<2.5%
CAS: 2634-33-5 EINECS: 220-120-9 Index number: 613-088-00-6 Reg.nr.: 01-2120761540-60-xxxx	1,2-benzisothiazol-3(2H)-one	⚠ Eye Dam. 1, H318; ⚠ Aquatic Acute 1, H400; ⚠ Acute Tox. 4, H302; ⚠ Skin Irrit. 2, H315; ⚠ Skin Sens. 1, H317 ATE: LD50 oral: 450 mg/kg Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.036 %	<0.05%

Additional information

Factor M=1, unless otherwise stated.

(Contd. on page 3)

GB

Safety data sheet
according to UK REACH

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rev n°: 4 (replaces version 3)

Revision date: 09.07.2025

Trade name: BISMARK

(Contd. of page 2)

For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures**4.1 Description of first aid measures****General information***Instantly remove any clothing soiled by the product.**Personal protection for the First Aider.***After inhalation***Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.**In case of unconsciousness bring patient into stable side position for transport.***After skin contact** *Instantly wash with water and soap and rinse thoroughly.***After eye contact** *Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.***After swallowing***Call a doctor immediately.**Rinse out mouth without swallowing, do not induce vomiting.***4.2 Most important symptoms and effects, both acute and delayed** *No further relevant information available.***4.3 Indication of any immediate medical attention and special treatment needed***Seek the advice of a Poison Control Centre**Treat symptomatically and supportively***SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing agents***CO₂, extinguishing powder. Fight larger fires with water spray or alcohol-resistant foam. Do not use a direct stream of water to extinguish.**Use fire fighting measures that suit the environment.***For safety reasons unsuitable extinguishing agents***Avoid full water jet.**None.***5.2 Special hazards arising from the substance or mixture***Formation of toxic gases is possible during heating or in case of fire.**Can be released in case of fire:**Carbon Oxides (CO_x)**Nitrous oxides (NO_x)**Chlorine (Cl₂)***5.3 Advice for firefighters****Protective equipment:***Do not inhale explosion gases or combustion gases.**Wear protective clothing conforming to European Standard EN 469.***Additional information***Cool endangered containers with water spray jet.**Collect contaminated fire fighting water separately. It must not enter drains.**Do not allow extinguishing media and spilled material to enter drains or water courses.***SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures***Ensure adequate ventilation**Keep away from ignition sources**Keep people at a distance and stay on the windward side.**Wear protective clothing.***6.1.1. For non-emergency personnel***wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing;**remove ignition sources, provide sufficient ventilation, control dust;**apply emergency procedures, evacuate the danger area or consult an expert.***6.1.2. For emergency responders***wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing;**In case of dust provide inhalation protection**Wear protective clothing, boots and glasses*

(Contd. on page 4)

Safety data sheet according to UK REACH

print: 09.07.2025

rev n°: 4 (replaces version 3)

Revision date: 09.07.2025

Trade name: BISMARK

(Contd. of page 3)

6.2 Environmental precautions:

Avoid ignition sources.

Inform respective authorities in case product reaches water or sewage system.

Do not allow to enter drainage system, surface or ground water.

Prevent from spreading (e.g. by damming-in or oil barriers).

Collect with suitable equipment and do not allow to enter drainage system, surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to Section 13.

6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle container with care.

Avoid splashes or spray in enclosed areas.

Wear personal protective equipments (PPE).

The usual precautionary measures for handling chemicals shall be observed.

Information about protection against explosions and fires:

The product is not flammable

Keep ignition sources away - Do not smoke.

Keep breathing equipment ready.

Handling

Avoid contact with the skin and vapour inhalation; do not eat, drink nor smoke while working.

Avoid direct or indirect contact with the product. Do not eat, drink or smoke while working.

7.2 Conditions for safe storage, including any incompatibilities**Storage**

Store in a cool and ventilated place, away from heat source and direct sunlight without open sewage system.

Keep out the reach of children, unauthorized persons and animals. Keep away from food, drink and animal feedingstuffs.

Requirements to be met by storerooms and containers: Store only in the original container.**Information about storage in one common storage facility:**

Prevent storage with incompatible materials (see chapter 10).

Store away from foodstuffs.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

7.3 Specific end use(s)

Agriculture

To be applied strictly for the uses described in the label.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters**Components with limit values that require monitoring at the workplace:****CAS: 64742-94-5 Solvent naphtha (petroleum), heavy arom.**TWA 100 mg/m³ (long-term)**DNELs****CAS: 15245-12-2 Calcium Ammonium Nitrate**

Oral	DNEL Short-term	10 mg/kg bw/day (consumers) Systemic effects
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CAS: 64742-94-5 Aromatic hydrocarbons C10-C13, naphthalene <1%

Oral	DNEL Long-term	7.5 mg/kg bw/day (consumers) systemic effects
Dermal	DNEL Long-term	12.5 mg/kg bw/day (workers) systemic effects

(Contd. on page 5)

Safety data sheet according to UK REACH

print: 09.07.2025

rev n°: 4 (replaces version 3)

Revision date: 09.07.2025

Trade name: BISMARK

(Contd. of page 4)

Inhalative	DNEL Long-term	7.5 mg/kg bw/day (consumers) systemic effects 151 mg/m ³ (workers) systemic effects 32 mg/m ³ (consumers) systemic effects
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PNECs
CAS: 15245-12-2 Calcium Ammonium Nitrate

PNEC 18 mg/L (sewage treatment plant)

Additional information: The lists that were valid during the compilation were used as basis.
8.2 Exposure controls
Appropriate engineering controls Eye wash stations shall be available in the work area.

Individual protection measures, such as personal protective equipment
General protective and hygienic measures
The usual precautionary measures for handling chemicals shall be observed.
Keep away from foodstuffs, beverages and food.
Take off immediately all contaminated clothing
Wash hands during breaks and at the end of the work.
Store protective clothing separately.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
Pregnant women must strictly avoid inhalation or contact with the skin.
Do not eat, drink or smoke while working.
Breathing equipment:

Filter A


Breathing protection recommended in accordance with the relevant European Standards.
Hand protection
Protective gloves (rubber or plastic).

Protective gloves against chemicals and micro-organisms in accordance with EN 374
Material of gloves Nitrile rubber, NBR

Eye/face protection

Tightly sealed safety glasses in accordance with EN 166.
Body protection: Protective work clothing.

Boots Safety footwear for professional use in accordance with EN 345.

Environmental exposure controls
Waste waters from equipment cleaning shall be disposed according to local and national regulation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
General Information
Physical state

Liquid

Colour:

Dark orange

Odour:

Aromatic

Odour threshold:

Not determined.

Melting point/freezing point:

Not applicable

Boiling point or initial boiling point and boiling range

Not determined

Flammability

Not applicable because the product is liquid

(Contd. on page 6)

Safety data sheet according to UK REACH

print: 09.07.2025

rev n°: 4 (replaces version 3)

Revision date: 09.07.2025

Trade name: **BISMARK**

(Contd. of page 5)

Lower and upper explosion limit**Lower:**Not explosive
Method EU A.14**Upper:**Not explosive
Method EU A.14**Flash point:**

no flash point up to 140 °C.

Auto-ignition temperature:

292.55±9.38 °C (EU A.15; ASTM E659-78)

Decomposition temperature:

Not determined.

pH at 20 °C

6.5 (CIPAC MT 75.3)

pH value**(1% in distilled water) at 20 °C**

7.84 (CIPAC MT 75.3)

pH (undiluted sample)**Viscosity:****Kinematic viscosity**

Not determined.

Kinematic viscosity at 20 °C

530.7 cPs (OECD 114; 20rpm)

dynamic:

Not determined.

Solubility**Water:**

dispersible

Partition coefficient n-octanol/water (log value)

Not determined.

Vapour pressure:

Not determined.

Density and/or relative density**Density at 20 °C**

1.132 g/ml (EU A.3; OECD 1109)

Relative density

Not determined.

Vapour density

Not determined.

9.2 Other information**Appearance:****Form:**

Liquid

Important information on protection of health and environment, and on safety.**Self-inflammability:**

Method EU A.15

Explosive properties:

Method EU A.14

Product is not explosive.

Change in condition**Softening point/range****Oxidising properties**

According to theoretical considerations based on chemical structure, the product does not possess explosive properties

Evaporation rate

Not determined.

Information with regard to physical hazard classes**Explosives**

The product is not explosive. Method EU A.14

Flammable gases

Not relevant due to the nature of the product, it doesn't not provide usefull informations

Aerosols

Not relevant due to the nature of the product, it doesn't not provide usefull informations

Oxidising gases

Not relevant due to the nature of the product, it doesn't not provide usefull informations

Gases under pressure

Not relevant due to the nature of the product, it doesn't not provide usefull informations

Flammable liquids

The product is not flammable as it does not contain flammable solvents.

Flammable solids

Not relevant due to the nature of the product, it doesn't not provide usefull informations

Self-reactive substances and mixtures

Not relevant due to the nature of the product, it doesn't not provide usefull informations

Pyrophoric liquids

Product is not autoflammable. Method EU A.15

Pyrophoric solids

Not relevant due to the nature of the product, it doesn't not provide usefull informations

Self-heating substances and mixtures

The product is not auto-flammable since it doesn't contain auto-flammable solvents

Substances and mixtures, which emit flammable gases in contact with water

Not relevant due to the nature of the product, it doesn't not provide usefull informations

(Contd. on page 7)

GB

Safety data sheet according to UK REACH

print: 09.07.2025

rev n°: 4 (replaces version 3)

Revision date: 09.07.2025

Trade name: **BISMARK**

(Contd. of page 6)

Oxidising liquids	The product is non-oxidising as it contains no oxidising solvents
Oxidising solids	Not relevant due to the nature of the product, it doesn't not provide usefull informations
Organic peroxides	Not relevant due to the nature of the product, it doesn't not provide usefull informations
Corrosive to metals	Not relevant due to the nature of the product, it doesn't not provide usefull informations
Desensitised explosives	Not relevant due to the nature of the product, it doesn't not provide usefull informations

SECTION 10: Stability and reactivity

10.1 Reactivity The product is not reactive under recommended handling conditions.

10.2 Chemical stability Stable under the recommended handling and storage conditions (see section 7).

Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions are known.

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products:

Thermal decomposition products may include:

Carbon monoxide and carbon dioxide

Nitrogen oxides (NO_x)

Chlorine

None in standard storage conditions.

SECTION 11: Toxicological information

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

Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values that are relevant for classification:

CLOMAZONE 55 + PENDIMETALIN 275 g/l CS

Oral	LD50	>2,000 mg/kg (rat) (OECD 423)
Dermal	LD50	>2,000 mg/kg (rat) (OECD 402)
Inhalative	LC50 (4 h)	>1.1 mg/L (rat) (OECD 403) Maximum obtainable concentration

CAS: 40487-42-1 pendimethalin (ISO)

Oral	LD50	4,665 mg/kg (rat) (OECD 401)
Dermal	LD50	>5,000 mg/kg (rat) (OECD 402)

CAS: 15245-12-2 Calcium Ammonium Nitrate

Oral	LD50	500 mg/kg (rat) (OECD 423)
Dermal	LD50	2,000-5,000 mg/kg (rat) (OECD 402)

CAS: 64742-94-5 Aromatic hydrocarbons C10-C13, naphtalene <1%

Oral	LD50	6,318 mg/kg (rat) (OECD 401)
		5,558 mg/kg (rat female) (OECD 401)
		7,093 mg/kg (rat male) (OECD 401)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50 (4 h)	>4,688 mg/L (rat) (OECD 403)

CAS: 81777-89-1 Clomazone

Oral	LD50	768 mg/kg (ATE)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50 (4 h)	4.85 mg/L (ATE)

CAS: 68512-34-5 Lignosulfonic acid, sodium salt, sulfomethylated

Oral	LD50	<10,000 mg/kg (rat)
Inhalative	LC50 (4 h)	>480 mg/L (rat)

(Contd. on page 8)

GB

Safety data sheet
 according to UK REACH

print: 09.07.2025

rev n°: 4 (replaces version 3)

Revision date: 09.07.2025

Trade name: BISMARK

(Contd. of page 7)

NOEL (no observable effect level)		
CAS: 15245-12-2 Calcium Ammonium Nitrate		
Oral	NOAEL	≥1,500 mg/kg bw/d (rat) (read across)
CAS: 64742-94-5 Aromatic hydrocarbons C10-C13, naphtalene <1%		
Oral	NOAEL	300 mg/kg bw/d (rat) (90 d)
	NOEL	486 mg/kg bw/d (Colinus virginianus) (EPA OPP 71-1 (Avian Acute Oral Toxicity Test))
CAS: 81777-89-1 Clomazone		
Oral	NOAEL	13.3 mg/kg bw/d (dog) (12 m)
		138 mg/kg bw/d (rat) (90 d)
	NOAEL (2y)	41 mg/kg bw/d (rat)
		No carcinogenic potential
Dermal	NOAEL	1,000 mg/kg bw/d (rat) (28 d)
Skin corrosion / irritation - Test		
CLOMAZONE 55 + PENDIMETALIN 275 g/l CS		
Irritation of skin	Skin corrosion	(rabbit) (OECD 404) Not irritant to the skin
CAS: 40487-42-1 pendimethalin (ISO)		
Irritation of skin	Skin corrosion	(rabbit) (OECD 404) not irritant
CAS: 64742-94-5 Aromatic hydrocarbons C10-C13, naphtalene <1%		
Irritation of skin	Skin corrosion	(rabbit) (OECD 404) Not irritating
CAS: 81777-89-1 Clomazone		
Irritation of skin	Skin corrosion	(rabbit) Not irritant
CAS: 68512-34-5 Lignosulfonic acid, sodium salt, sulfomethylated		
Irritation of skin	Skin corrosion	(rabbit) Not irritant
Serious eye damage/irritation Causes serious eye damage.		
Serious eye damage / Irritation - Test		
CLOMAZONE 55 + PENDIMETALIN 275 g/l CS		
Irritation of eyes	Eye Irritation	(rabbit) (OECD 405) Irritant to the eyes
CAS: 40487-42-1 pendimethalin (ISO)		
Irritation of eyes	Eye Irritation	(rabbit) (OECD 405) not irritant
CAS: 64742-94-5 Aromatic hydrocarbons C10-C13, naphtalene <1%		
Irritation of eyes	Eye Irritation	(rabbit) (OECD 405) Not irritating
CAS: 81777-89-1 Clomazone		
Irritation of eyes	Eye Irritation	(rabbit) Not irritant
CAS: 68512-34-5 Lignosulfonic acid, sodium salt, sulfomethylated		
Irritation of eyes	Eye Irritation	(rabbit) Irritant
Sensitisation - Test		
CLOMAZONE 55 + PENDIMETALIN 275 g/l CS		
Sensitization	(mice) (OECD 429 Mouse Local lymphnode assay)	Not skin sensitizer
CAS: 64742-94-5 Aromatic hydrocarbons C10-C13, naphtalene <1%		
Sensitization	(guinea pig) (OECD 406)	Not sensitizing
CAS: 68512-34-5 Lignosulfonic acid, sodium salt, sulfomethylated		
Sensitization	(guinea pig)	Not sensitizing

(Contd. on page 9)

GB

Safety data sheet according to UK REACH

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Revision date: 09.07.2025

Trade name: BISMARK

(Contd. of page 8)

Reproductive toxicity Suspected of damaging the unborn child.**Other information:** For symptoms and effects see section 4.**Additional toxicological information:****Acute effects (acute toxicity, irritation and corrosivity)** No further information available.**CMR effects (cancerogenity, mutagenicity and toxicity for reproduction)** No relevant information available.**11.2 Information on other hazards****Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity Very toxic to aquatic life with long lasting effects.**Aquatic toxicity:****CLOMAZONE 55 + PENDIMETALIN 275 g/l CS**

LC50 (96h)	>100 mg/L (rainbow trout (<i>oncorhynchus mykiss</i>))
EC50 (48h)	>100 mg/L (<i>Daphnia magna</i>)
ErC50 (72h)	2,820 mg/L (algae <i>Pseudokirchneriella subcapitata</i>)
EyC50 (72h)	0.7 mg/L (algae <i>Pseudokirchneriella subcapitata</i>)
EC50 (7d)	>100 mg/L (<i>Lemna minor</i>)

CAS: 40487-42-1 pendimethalin (ISO)

EC50 (72h)	0.0337 mg/L (algae <i>selenastrum capricornutum</i>)
LC50 (96h)	0.89 mg/L (rainbow trout (<i>oncorhynchus mykiss</i>))
EC50 (48h)	0.4 mg/L (<i>Daphnia magna</i>)
EC50	0.005 mg/L (algae) (5 d - <i>Skeletonema costatum</i>)
NOEC	0.0145 mg/L (<i>Daphnia magna</i>) (21 d) 0.05 mg/L (rainbow trout (<i>oncorhynchus mykiss</i>)) (21 d)

CAS: 15245-12-2 Calcium Ammonium Nitrate

EC50 (72h)	>100 mg/L (algae <i>Pseudokirchneriella subcapitata</i>) (OECD 201)
EC50 (48h)	>100 mg/L (<i>Daphnia magna</i>)
LC 50	447 mg/L (<i>Cyprinus carpio</i>) (48 h)

CAS: 64742-94-5 Aromatic hydrocarbons C10-C13, naphthalene <1%

LC50 (96h)	0.46 mg/L (rainbow trout (<i>oncorhynchus mykiss</i>)) (EPA OPP 72-1 (Fish Acute Toxicity Test)) LL50 = 3.6 mg/l
EC50 (48h)	0.471 mg/L (<i>Tetrahymena pyriformis</i>) 1.1 mg/L (<i>Daphnia magna</i>) (EPA OPP 72-2 (Aquatic Invertebrate Acute Tox. Test))
EbC50 (72h)	0.29 mg/L (algae <i>Pseudokirchneriella subcapitata</i>)
ErC50 (72h)	0.42 mg/L (algae <i>Pseudokirchneriella subcapitata</i>)

CAS: 81777-89-1 Clomazone

LC50 (96h)	15.5 mg/L (rainbow trout (<i>oncorhynchus mykiss</i>))
EC50 (48h)	12.7 mg/L (<i>Daphnia magna</i>)
EC50	>185 mg/L (algae) (<i>Navicula pelliculosa</i> - 120 h - ErC50) >34 mg/L (<i>lemna gibba</i>) (14 d - ErC50)

CAS: 68512-34-5 Lignosulfonic acid, sodium salt, sulfomethylated

LC50 (96h)	615 mg/L (<i>pimephales promelas</i>)
EC50 (48h)	5.4 mg/L (<i>Crassostrea gigas</i>)

Environmental toxicity**CAS: 40487-42-1 pendimethalin (ISO)**

Oral	LD 50	1,421 mg/kg bw (<i>Anas platyrhynchos</i>)
	LD 50	49.8 µg/bee (bee (<i>Apis mellifera</i>))

CAS: 81777-89-1 Clomazone

Oral	EC 50	2,510 mg/kg (<i>Colinus virginianus</i>)
	LD 50	>85.29 µg/bee (bee (<i>Apis mellifera</i>))
Dermal	LD 50	>100 µg/bee (bee (<i>Apis mellifera</i>))

(Contd. on page 10)

Safety data sheet according to UK REACH

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rev n°: 4 (replaces version 3)

Revision date: 09.07.2025

Trade name: **BISMARK**

(Contd. of page 9)

12.2 Persistence and degradability**CAS: 64742-94-5 Aromatic hydrocarbons C10-C13, naphthalene <1%**

Biodegradation 70 % (28 d OECD 301F)

12.3 Bioaccumulative potential**CAS: 40487-42-1 pendimethalin (ISO)**

Octanol / Water partition coefficient 5.18

BCF - Bioconcentration factor 5,100

CAS: 81777-89-1 Clomazone

Octanol / Water partition coefficient 2.54 (partition n-octanol/water) (23°C)

CAS: 68512-34-5 Lignosulfonic acid, sodium salt, sulfomethylatedOctanol / Water partition coefficient ≤ 3.45 **12.4 Mobility in soil** No further relevant information available.**12.5 Results of PBT and vPvB assessment****PBT:** None of the ingredients meets the classification requirements.**vPvB:** None of the ingredients meets the classification requirements.**12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.**12.7 Other adverse effects** No further relevant information available.**Remark:**

Toxic for aquatic organisms.

Very toxic for fish

DT 50 (active ingredient)**CAS: 40487-42-1 pendimethalin (ISO)**

DT 50 30-150 days (soil)

CAS: 81777-89-1 Clomazone

DT 50 89 days (soil)

moderate to persistent

52.5 days (water)

slow degradation

Additional ecological information:**General notes:**

Danger to drinking water if even small quantities leak into soil.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Disposal according to national regulations.

Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings: Dispose empty packagings according to current regulations.**SECTION 14: Transport information****14.1 UN number or ID number**

ADR/RID/ADN, IMDG, IATA

UN3082

14.2 UN proper shipping name

ADR/RID/ADN

3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (pendimethalin (ISO))

IMDG

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (pendimethalin (ISO)), MARINE POLLUTANT

(Contd. on page 11)

GB

Safety data sheet according to UK REACH

print: 09.07.2025

rev n°: 4 (replaces version 3)

Revision date: 09.07.2025

Trade name: BISMARK

(Contd. of page 10)

IATA

 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
 (pendimethalin (ISO))

14.3 Transport hazard class(es)
ADR/RID/ADN

Class
Label

 9 (M6) Miscellaneous dangerous substances and articles.
 9

IMDG, IATA

Class
Label

 9 Miscellaneous dangerous substances and articles.
 9

14.4 Packing group
ADR/RID/ADN, IMDG, IATA

III

14.5 Environmental hazards:

 Product contains environmentally hazardous substances:
 pendimethalin (ISO)

Marine pollutant:

 Yes
 Symbol (fish and tree)

Special marking (ADR/RID/ADN):

Symbol (fish and tree)

Special marking (IATA):

Symbol (fish and tree)

14.6 Special precautions for user

Warning: Miscellaneous dangerous substances and articles.

Kemler Number:

90

EMS Number:

F-A,S-F

Stowage Category

A

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

Transport/Additional information:
ADR/RID/ADN
Limited quantities (LQ)

5L

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

Transport category

3

Tunnel restriction code

E

Remarks:

 Transport in Limited Quantities only in suitable packaging.
 ADR Special Provision 375 may apply for UN 3077 in packagings of 5 kg or less and for UN3082 in packagings of 5 L or less.

IMDG
Limited quantities (LQ)

5L

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

Remarks:

IMDG Code 2.10.2.7 may apply for UN 3077 in packagings of 5 kg or less and for UN3082 in packagings of 5 L or less.

IATA
Remarks:

For UN 3077 in packagings of 5 kg or less and UN3082 in packagings of 5 L or less, Special Provision A197 may apply according to IATA Dangerous Goods Regulation.

(Contd. on page 12)

Safety data sheet
according to UK REACH

print: 09.07.2025

rev n°: 4 (replaces version 3)

Revision date: 09.07.2025

Trade name: BISMARK

(Contd. of page 11)

UN "Model Regulation":UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S. (PENDIMETHALIN (ISO)), 9, III**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Regulation (EC) n. 1907/2006

Regulation (EC) n. 1272/2008

Regulation (EC) n. 790/2009 and (EU) no. 758/2013

Regulation (EU) n. 2020/878

Regulation (EU) n. 286/2011

Regulation (EU) n. 618/2012

Regulation (EU) n. 487/2013

Regulation (EU) n. 944/2013

Regulation (EU) n. 605/2014

Regulation (EU) n. 2015/1221

Regulation (EU) n. 2016/918

Regulation (EU) n. 2016/1179

Regulation (EU) n. 2017/776

Regulation (EU) n. 2018/669

Regulation (EU) n. 2018/521

Regulation (EU) n. 2018/1480

Regulation (EU) n. 2020/217

Regulation (EU) n. 2020/1182

Regulation (EU) n. 1107/2009

Regulation (EU) n. 2021/643

Regulation (EU) n. 2021/849

Regulation (EU) n. 2022/692

Regulation (EU) n. 2023/1434

Regulation (EU) n. 2022/1435

Regulation (EU) n. 2024/197

Directive 2012/18/EU**Named dangerous substances - ANNEX I** Not applicable**Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t**Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. Please see https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/crisis-and-terrorism/explosives/explosives-precursors/docs/list_of_competent_authorities_and_national_contact_points_en.pdf.

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Bibliographic sources:

- ECHA database
- HSDB in Pubchem
- Pesticide properties database
- Pesticide manual
- Internal company documents

Department issuing data specification sheet: Product safety department.**Contact:**

Product safety department

SIPCAM OXON msds@sipcam.comFor Poison Centres in Europe see: <https://poisoncentres.echa.europa.eu>**H statements of components:**

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

(Contd. on page 13)

GB

Safety data sheet according to UK REACH

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Trade name: BISMARK

(Contd. of page 12)

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H361d Suspected of damaging the unborn child.

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.

Abbreviations and acronyms:

EC 50: Effective concentration, 50 percent

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (UK REACH)

PNEC: Predicted No-Effect Concentration (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

ATE: Acute toxicity estimate values

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Repr. 2: Reproductive toxicity – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Sources

Document elaborated on the basis of the data required by the EC Regulation 1107/2009 (plant protection products) and in accordance with the EC Regulation 878/2020.

* Data compared to the previous version altered. .

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