

# Safety data sheet

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BASF Safety data sheet according to Regulation (EC) No. 1907/2006

Date / Revised: 04.09.2014

Version: 4.0

Product: **TROOPER**

(ID no. 30458221/SDS\_CPA\_GB/EN)

Date of print 05.09.2014

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

### 1.1. Product identifier

**TROOPER**

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

Relevant identified uses: crop protection product, herbicide

### 1.3. Details of the supplier of the safety data sheet

Company:BASF SE  
67056 Ludwigshafen  
GERMANYContact address:BASF plc  
PO Box 4, Earl Road, Cheadle Hulme,  
Cheadle, Cheshire  
SK8 6QG, UNITED KINGDOM

Telephone: +44 161 485-6222

E-mail address: product-safety-north@basf.com

### 1.4. Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

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## SECTION 2: Hazards Identification

### 2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

Asp. Tox. 1

Acute Tox. 4 (oral)

Skin Corr./Irrit. 2

Aquatic Acute 1  
Aquatic Chronic 1

According to Directive 67/548/EEC or 1999/45/EC

Possible Hazards:

Harmful if swallowed.

Irritating to skin.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

For the classifications not written out in full in this section the full text can be found in section 16.

## 2.2. Label elements

Globally Harmonized System (GHS) in accordance with UK regulations.

Pictogram:



Signal Word:

Danger

Hazard Statement:

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary Statements (Prevention):

P264	Wash contaminated body parts thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves.

Precautionary Statements (Response):

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P330	Rinse mouth.
P331	Do NOT induce vomiting.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P361	Remove/Take off immediately all contaminated clothing.
P391	Collect spillage.

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## Precautionary Statements (Disposal):

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

## Labeling of special preparations (GHS):

May produce an allergic reaction. Contains: PENDIMETHALIN, FLUFENACET

According to Regulation (EC) No 1272/2008 [CLP]

Hazard determining component(s) for labelling: PENDIMETHALIN, FLUFENACET, SOLVENT NAPHTHA

According to Directive 67/548/EEC or 1999/45/EC

Classification/labelling in accordance with UK regulations.

## Hazard symbol(s)

Xn Harmful.



N Dangerous for the environment.



## R-phrases(s)

R22 Harmful if swallowed.  
 R38 Irritating to skin.  
 R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## S-phrases(s)

S2 Keep out of the reach of children.  
 S13 Keep away from food, drink and animal feeding stuffs.  
 S20/21 When using do not eat, drink or smoke.  
 S24 Avoid contact with skin.  
 S35 This material and its container must be disposed of in a safe way.  
 S36/37 Wear suitable protective clothing and gloves.  
 S46 If swallowed, seek medical advice immediately and show this container or label.  
 S57 Use appropriate container to avoid environmental contamination.

Hazard determining component(s) for labelling: PENDIMETHALIN, FLUFENACET, SOLVENT NAPHTHA

The product contains: PENDIMETHALIN, FLUFENACET  
 May produce an allergic reaction.

**2.3. Other hazards**

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According to Regulation (EC) No 1272/2008 [CLP]

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

## SECTION 3: Composition/Information on Ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Chemical nature

crop protection product, herbicide, Emulsifiable concentrate (EC)

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

pendimethalin (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine

Content (W/W): 28.2 %	Skin Sens. 1
CAS Number: 40487-42-1	Aquatic Acute 1
EC-Number: 254-938-2	Aquatic Chronic 1
INDEX-Number: 609-042-00-X	H317, H400, H410

Differing classification according to current knowledge and the criteria given in Annex I of Regulation (EC) No. 1272/2008

Skin Sens. 1B  
 Aquatic Acute 1  
 Aquatic Chronic 1

flufenacet (ISO); N-(4-fluorophenyl)-N-isopropyl-2-(5-trifluoromethyl-[1,3,4]thiadiazol-2-yloxy)acetamide

Content (W/W): 5.6 %	Acute Tox. 4 (oral)
CAS Number: 142459-58-3	Skin Sens. 1
INDEX-Number: 613-164-00-9	STOT RE 2
	Aquatic Acute 1
	Aquatic Chronic 1
	M-factor acute: 100
	M-factor acute: 100
	M-factor chronic: 100
	H302, H317, H400, H410, H373

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## solvent naphtha

Content (W/W): < 70 %  
 CAS Number: 64742-94-5  
 REACH registration number: 01-2119451097-39

Asp. Tox. 1  
 Aquatic Chronic 2  
 H411, H304, EUH066

## Tridecyl alcohol ethoxylate

Content (W/W): < 5 %  
 CAS Number: 24938-91-8

Acute Tox. 4 (oral)  
 Eye Dam./Irrit. 1  
 H318, H302

## benzenesulfonic acid, mono-c11-13-branched alkyl derivs., calcium salts

Content (W/W): < 5 %  
 CAS Number: 68953-96-8  
 EC-Number: 273-234-6

Flam. Liq. 3  
 Skin Corr./Irrit. 2  
 Eye Dam./Irrit. 1  
 STOT SE 3 (drowsiness and dizziness)  
 STOT SE 3 (irr. to respiratory syst.)  
 H318, H315, H226, H336, H335

## 2-methylpropan-1-ol; iso-butanol

Content (W/W): < 3 %  
 CAS Number: 78-83-1  
 EC-Number: 201-148-0  
 REACH registration number: 01-2119484609-23  
 INDEX-Number: 603-108-00-1

Flam. Liq. 3  
 Skin Corr./Irrit. 2  
 Eye Dam./Irrit. 1  
 STOT SE 3 (drowsiness and dizziness)  
 STOT SE 3 (irr. to respiratory syst.)  
 H226, H318, H315, H336, H335

## naphthalene

Content (W/W): < 0.5 %  
 CAS Number: 91-20-3  
 EC-Number: 202-049-5  
 INDEX-Number: 601-052-00-2

Acute Tox. 4 (oral)  
 Carc. 2  
 Aquatic Acute 1  
 Aquatic Chronic 1  
 H302, H351, H400, H410  
 M-factor acute: 1  
 M-factor chronic: 1

## | Octanal

Content (W/W): < 0.5 %  
 CAS Number: 124-13-0  
 EC-Number: 204-683-8

Flam. Liq. 3  
 Skin Corr./Irrit. 2  
 Eye Dam./Irrit. 2  
 Skin Sens. 1  
 Aquatic Chronic 2  
 H226, H319, H315, H317, H411

Hazardous ingredients

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according to Directive 1999/45/EC

pendimethalin (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine

Content (W/W): 28.2 %

CAS Number: 40487-42-1

EC-Number: 254-938-2

INDEX-Number: 609-042-00-X

Hazard symbol(s): Xi, N

R-phrases(s): 43, 50/53

flufenacet (ISO); N-(4-fluorophenyl)-N-isopropyl-2-(5-trifluoromethyl-[1,3,4]thiadiazol-2-yloxy)acetamide

Content (W/W): 5.6 %

CAS Number: 142459-58-3

INDEX-Number: 613-164-00-9

Hazard symbol(s): Xn, N

R-phrases(s): 22, 43, 48/22, 50/53

solvent naphtha

Content (W/W): &lt; 70 %

CAS Number: 64742-94-5

REACH registration number: 01-2119451097-39

Hazard symbol(s): Xn, N

R-phrases(s): 65, 66, 51/53

Tridecyl alcohol ethoxylate

Content (W/W): &lt; 5 %

CAS Number: 24938-91-8

Hazard symbol(s): Xn

R-phrases(s): 22, 41

benzenesulfonic acid, mono-c11-13-branched alkyl derivs., calcium salts

Content (W/W): &lt; 5 %

CAS Number: 68953-96-8

EC-Number: 273-234-6

Hazard symbol(s): Xi, N

R-phrases(s): 10, 37/38, 41, 67, 51/53

2-methylpropan-1-ol; iso-butanol

Content (W/W): &lt; 3 %

CAS Number: 78-83-1

EC-Number: 201-148-0

REACH registration number: 01-2119484609-23

INDEX-Number: 603-108-00-1

Hazard symbol(s): Xi

R-phrases(s): 10, 37/38, 41, 67

naphthalene

Content (W/W): &lt; 0.5 %

CAS Number: 91-20-3

EC-Number: 202-049-5

INDEX-Number: 601-052-00-2

Hazard symbol(s): Xn, N

R-phrases: 22, 40, 50/53

Carc. Cat. 3

**| Octanal**

Content (W/W): &lt; 0.5 %

CAS Number: 124-13-0

EC-Number: 204-683-8

Hazard symbol(s): Xi, N

R-phrases: 10, 36/38, 43, 51/53

For the classifications not written out in full in this section, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, the full text is listed in section 16.

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**SECTION 4: First-Aid Measures****4.1. Description of first aid measures**

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

Show container, label and/or safety data sheet to physician.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Immediately wash thoroughly with soap and water, seek medical attention.

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention. Do not induce vomiting due to aspiration hazard.

**4.2. Most important symptoms and effects, both acute and delayed**

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing media

Suitable extinguishing media:  
carbon dioxide, foam, dry powder, water spray

### 5.2. Special hazards arising from the substance or mixture

carbon monoxide, hydrogen fluoride, Carbon dioxide, nitrogen oxides, sulfur oxides  
The substances/groups of substances mentioned can be released in case of fire.

### 5.3. Advice for fire-fighters

Special protective equipment:  
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

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## SECTION 6: Accidental Release Measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

### 6.2. Environmental precautions

Do not allow contamination of public drains or surface or ground waters. Inform local water plc if spillage enters drains and the Environment Agency (England & Wales), the Scottish Environmental Protection Agency (Scotland), or the Environment and Heritage Service (Northern Ireland) if it enters surface or ground waters. Keep people and animals away.

### 6.3. Methods and material for containment and cleaning up

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.

Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

### 6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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## SECTION 7: Handling and Storage

### 7.1. Precautions for safe handling



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No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:

Vapours may form ignitable mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

## 7.2. Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

Protect from temperatures above: 40 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

## 7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

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## SECTION 8: Exposure Controls/Personal Protection

### 8.1. Control parameters

#### Components with occupational exposure limits

78-83-1: 2-methylpropan-1-ol; iso-butanol

TWA value 154 mg/m<sup>3</sup> ; 50 ppm (WEL/EH 40 (UK))

STEL value 231 mg/m<sup>3</sup> ; 75 ppm (WEL/EH 40 (UK))

91-20-3: naphthalene

TWA value 50 mg/m<sup>3</sup> ; 10 ppm (OEL (EU))

indicative

Refer to the current edition of HSE Guidance Note EH40 Occupational Exposure Limits (United Kingdom). For normal use and handling refer to the product label/leaflet. In all other cases the following apply.

### 8.2. Exposure controls

#### Personal protective equipment

Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic and alkaline compounds (e.g. EN 14387 Type ABEK).

Hand protection:

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Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact  
(Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) and other

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

**SECTION 9: Physical and Chemical Properties****9.1. Information on basic physical and chemical properties**

Form:	liquid	
Colour:	amber	
Odour:	aromatic	
Odour threshold:	Not determined due to potential health hazard by inhalation.	
pH value:	approx. 4 - 6 (CIPAC standard water D, 1 %(m), 20 °C)	(pH Meter)
solidification temperature:	approx. -10 °C	
Boiling point:	Information applies to the solvent. approx. 111 °C	
Flash point:	Information applies to the solvent. 63.5 °C	(DIN EN ISO 13736)
Evaporation rate:	not applicable	
Flammability:	not highly flammable	(Directive 92/69/EEC, A.12)
Lower explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.	

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Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.	
Ignition temperature:	377 °C	(Directive 84/449/EEC, A.15)
Vapour pressure:	approx. 0.003 kPa (20 °C)	
Density:	approx. 1.06 g/cm <sup>3</sup> (20 °C)	(OECD Guideline 109)
Relative vapour density (air):	not applicable	
Solubility in water:	emulsifiable	
Partitioning coefficient n-octanol/water (log Kow):	not applicable	
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
Viscosity, dynamic:	11.7 mPa.s (25 °C)	(calculated (from kinematic viscosity))
Viscosity, kinematic:	7 mm <sup>2</sup> /s (40 °C)	
Explosion hazard:	not explosive	(Directive 92/69/EEC, A.14)
Fire promoting properties:	not fire-propagating	(Directive 2004/73/EC, A.21)

## 9.2. Other information

Other Information:

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

### 10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### 10.3. Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

### 10.4. Conditions to avoid

See MSDS section 7 - Handling and storage.

### 10.5. Incompatible materials

Substances to avoid:  
strong bases, strong oxidizing agents, strong acids

### **10.6. Hazardous decomposition products**

Hazardous decomposition products:  
No hazardous decomposition products if stored and handled as prescribed/indicated.

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## **SECTION 11: Toxicological Information**

### **11.1. Information on toxicological effects**

#### Acute toxicity

Assessment of acute toxicity:  
Of moderate toxicity after single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:  
LD50 rat (oral): 1,340 mg/kg (OECD Guideline 401)

LC50 rat (by inhalation): > 5.08 mg/l 4 h (OECD Guideline 403)  
An aerosol was tested.

LD50 rat (dermal): > 4,000 mg/kg (OECD Guideline 402)

#### Irritation

Assessment of irritating effects:  
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Skin contact causes irritation. Not irritating to the eyes.

Experimental/calculated data:  
Skin corrosion/irritation rabbit: Irritant. (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

#### Respiratory/Skin sensitization

Assessment of sensitization:  
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:

modified Buehler test guinea pig: Skin sensitizing effects were not observed in animal studies. (OECD Guideline 406)

#### Germ cell mutagenicity

##### Assessment of mutagenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

#### Carcinogenicity

##### Assessment of carcinogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: pendimethalin (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4-xylylidine*

##### *Assessment of carcinogenicity:*

*In long-term studies in rats the substance induced thyroid tumors. The effect is caused by an animal specific mechanism that has no human counter part. In long-term studies in mice in which the substance was given by feed, a carcinogenic effect was not observed.*

*Information on: naphthalene*

##### *Assessment of carcinogenicity:*

*In long-term studies in rats and mice in which the substance was given by inhalation, a carcinogenic effect was observed. EU-classification The substance was classified as a group 3 carcinogen by the German MAK-Commission (substances for which a suspicion of a carcinogenic potential exists). IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans).*  
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#### Reproductive toxicity

##### Assessment of reproduction toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

#### Developmental toxicity

##### Assessment of teratogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

#### Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

##### Assessment of repeated dose toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: pendimethalin (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4-xylylidine*

##### *Assessment of repeated dose toxicity:*

*No substance-specific organotoxicity was observed after repeated administration to animals. Adaptive effects were observed after repeated exposure in animal studies.*

*Information on: flufenacet (ISO); N-(4-fluorophenyl)-N-isopropyl-2-(5-trifluoromethyl-[1,3,4]thiadiazol-2-yloxy)acetamide*

*Assessment of repeated dose toxicity:*

*Repeated oral exposure may affect certain organs.*

*Information on: naphthalene*

*Assessment of repeated dose toxicity:*

*The substance may cause damage to the olfactory epithelium after repeated inhalation. No adverse effects were observed after repeated exposure in animal studies.*

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Aspiration hazard

May also damage the lung at swallowing (aspiration hazard).

Other relevant toxicity information

Misuse can be harmful to health.

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## SECTION 12: Ecological Information

### 12.1. Toxicity

Assessment of aquatic toxicity:

Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Toxicity to fish:

LC50 (96 h) 0.63 mg/l, *Oncorhynchus mykiss* (OECD 203; ISO 7346; 92/69/EEC, C.1, Flow through.)

Aquatic invertebrates:

EC50 (48 h) 5.3 mg/l, *Daphnia magna* (Directive 92/69/EEC, C.2, static)

Aquatic plants:

EC50 (72 h) 0.017 mg/l (biomass), *Selenastrum capricornutum* (OECD Guideline 201)

EC50 (7 d) 0.186 mg/l, *Lemna gibba* (OECD guideline 221, static)

### 12.2. Persistence and degradability

Assessment biodegradation and elimination (H<sub>2</sub>O):

The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: pendimethalin (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine*

*Assessment biodegradation and elimination (H2O):*

*Not readily biodegradable (by OECD criteria).*

*Information on: flufenacet (ISO); N-(4-fluorophenyl)-N-isopropyl-2-(5-trifluoromethyl-[1,3,4]thiadiazol-2-yloxy)acetamide*

*Assessment biodegradation and elimination (H2O):*

*Not readily biodegradable (by OECD criteria).*

### 12.3. Bioaccumulative potential

Assessment bioaccumulation potential:

The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: pendimethalin (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine*

*Bioaccumulation potential:*

*Bioconcentration factor: 5,100*

*Based on a weight of evidence, the compound will not bioaccumulate.*

*Information on: flufenacet (ISO); N-(4-fluorophenyl)-N-isopropyl-2-(5-trifluoromethyl-[1,3,4]thiadiazol-2-yloxy)acetamide*

*Bioaccumulation potential:*

*Bioconcentration factor: 71.4, Oncorhynchus mykiss*

*Does not accumulate in organisms.*

### 12.4. Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: pendimethalin (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine*

*Assessment transport between environmental compartments:*

*Volatility: The substance will slowly evaporate into the atmosphere from the water surface.*

*Adsorption in soil: Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.*

*Information on: flufenacet (ISO); N-(4-fluorophenyl)-N-isopropyl-2-(5-trifluoromethyl-[1,3,4]thiadiazol-2-yloxy)acetamide*

*Assessment transport between environmental compartments:*

*Adsorption in soil: Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.*

### 12.5. Results of PBT and vPvB assessment

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

### 12.6. Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

### 12.7. Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

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## SECTION 13: Disposal Considerations

### 13.1. Waste treatment methods

Must be sent to a suitable incineration plant, observing local regulations.

The UK Environmental Protection (Duty of Care) Regulations (EP) and amendments should be noted (United Kingdom).

This product and any uncleaned containers must be disposed of as hazardous waste in accordance with the 2005 Hazardous Waste Regulations and amendments (United Kingdom)

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

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## SECTION 14: Transport Information

### Land transport

ADR

UN number	UN3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains PENDIMETHALIN, SOLVENT NAPHTHA)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	Tunnel code: E

RID

UN number	UN3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains PENDIMETHALIN, SOLVENT NAPHTHA)
Transport hazard class(es):	9, EHSM



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BASF Safety data sheet according to Regulation (EC) No. 1907/2006

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Product: **TROOPER**

(ID no. 30458221/SDS\_CPA\_GB/EN)

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Packing group: III  
Environmental hazards: yes  
Special precautions for user: None known

**Inland waterway transport**

ADN

UN number: UN3082  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains PENDIMETHALIN, SOLVENT NAPHTHA)  
Transport hazard class(es): 9, EHSM  
Packing group: III  
Environmental hazards: yes  
Special precautions for user: None known  
Transport in inland waterway vessel: Not evaluated

**Sea transport**

IMDG

UN number: UN 3082  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains PENDIMETHALIN, SOLVENT NAPHTHA)  
Transport hazard class(es): 9, EHSM  
Packing group: III  
Environmental hazards: yes  
Marine pollutant: YES  
Special precautions for user: None known

**Air transport**

IATA/ICAO

UN number: UN 3082  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains PENDIMETHALIN, SOLVENT NAPHTHA)  
Transport hazard class(es): 9, EHSM  
Packing group: III  
Environmental hazards: yes  
Special precautions for user: None known

**14.1. UN number**

See corresponding entries for "UN number" for the respective regulations in the tables above.

**14.2. UN proper shipping name**

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

**14.3. Transport hazard class(es)**

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

**14.4. Packing group**

See corresponding entries for "Packing group" for the respective regulations in the tables above.

**14.5. Environmental hazards**

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

**14.6. Special precautions for user**

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Regulation:	Not evaluated
Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

**Further information**

This product is subject to the most recent edition of "The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations" and their amendments (United Kingdom).

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**SECTION 15: Regulatory Information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

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

The data should be considered when making any assessment under the Control of Substances Hazardous to Health Regulations (COSHH), and related guidance, for example, 'COSHH Essentials' (United Kingdom).

This product is classified under the Chemicals (Hazard Information and Packaging) Regulations, (CHIP) (United Kingdom).

This product may be subject to the Control of Major Accident Hazards Regulations (COMAH), and amendments if specific threshold tonnages are exceeded (United Kingdom).

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

## 15.2. Chemical Safety Assessment

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

## SECTION 16: Other Information

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

Full text of the classifications, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, if mentioned in section 2 or 3:

Xi	Irritant.
N	Dangerous for the environment.
Xn	Harmful.
43	May cause sensitization by skin contact.
50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
22	Harmful if swallowed.
48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
65	Harmful: may cause lung damage if swallowed.
66	Repeated exposure may cause skin dryness or cracking.
51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
41	Risk of serious damage to eyes.
10	Flammable.
37/38	Irritating to respiratory system and skin.
67	Vapours may cause drowsiness and dizziness.
40	Limited evidence of a carcinogenic effect.
36/38	Irritating to eyes and skin.
Asp. Tox.	Aspiration hazard
Acute Tox.	Acute toxicity
Skin Corr./Irrit.	Skin corrosion/irritation
Aquatic Acute	Hazardous to the aquatic environment - acute
Aquatic Chronic	Hazardous to the aquatic environment - chronic
Skin Sens.	Skin sensitization
STOT RE	Specific target organ toxicity — repeated exposure
Eye Dam./Irrit.	Serious eye damage/eye irritation
Flam. Liq.	Flammable liquid
STOT SE	Specific target organ toxicity — single exposure
Carc.	Carcinogenicity
Carc. Cat. 3	Carcinogenic substances Category 3: Substances which cause concern for man owing to possible carcinogenic effects.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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H302	Harmful if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H304	May be fatal if swallowed and enters airways.
EUH066	Repeated exposure may cause skin dryness or cracking.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H226	Flammable liquid and vapour.
H336	May cause drowsiness or dizziness.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H319	Causes serious eye irritation.

If you have any queries relating to this MSDS, its contents or any other product safety related questions, please write to the following e-mail address: [product-safety-north@basf.com](mailto:product-safety-north@basf.com)

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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Vertical lines in the left hand margin indicate an amendment from the previous version.