

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

#### 1.1. Product identifier

Product form : Substance  
Name : Bentazone techn. min. 97%  
EC index no : 613-012-00-1  
EC no : 246-585-8  
CAS No : 25057-89-0  
Type of product : Biocide  
Formula : C10H12N2O3S  
Synonyms : Bentazon / Benzo-1H-2,1,3-thiadiazin-4(3H)-one, 3-(1-methylethyl)-, 2,2-dioxide / 1H-2,1,3-Benzothiadiazin-4(3H)-one, 3-(1-methylethyl)-, 2,2-dioxide / 1H-2,1,3-Benzothiadiazin-4(3H)-one, 3-isopropyl-, 2,2-dioxide / 3-Isopropyl-2,1,3-benzothiadiazine-4-one-2,2-dioxide / 3-Isopropyl-1H-2,1,3-benzothiadiazin-4(3H)-one 2,2-dioxide / Basagran / 2-[(1-Methylethyl)benzo]-2,1,3-thiadiazin-4(3H)-one-2,2-dioxide / Basagran M

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

##### 1.2.1. Relevant identified uses

Main use category : Professional use  
Use of the substance/mixture : Herbicide

##### 1.2.2. Uses advised against

No additional information available

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

Simonis B.V.  
7000 AP Doetinchem - The Netherlands  
T +31 314 333 700 - F +31 314 344 167  
[agrochem@simonisbv.nl](mailto:agrochem@simonisbv.nl) - <http://www.simonisbv.nl/>

#### 1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Remark
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241	

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4 H302  
Serious eye damage/eye irritation, Category 2 H319  
Sensitisation — Skin, Category 1 H317  
Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412  
Full text of H statements : see section 16

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H302 - Harmful if swallowed  
H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation  
H412 - Harmful to aquatic life with long lasting effects

# Bentazone techn. min. 97%

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Precautionary statements (CLP)	: P264 - Wash hands, forearms and face thoroughly after handling P273 - Avoid release to the environment P280 - Wear eye protection, protective clothing, protective gloves, face protection P301+P312 - IF SWALLOWED: Call a doctor, a POISON CENTER if you feel unwell P333+P313 - If skin irritation or rash occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P501 - Dispose of contents/container to hazardous or special waste collection point.
Child-resistant fastening	: No
Tactile warning	: No

### 2.3. Other hazards

Adverse physicochemical, human health and environmental effects : Harmful to aquatic life with long lasting effects. Causes serious eye irritation. May cause an allergic skin reaction. Harmful if swallowed.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Name	: Bentazone techn. min. 97%
CAS No	: 25057-89-0
EC no	: 246-585-8
EC index no	: 613-012-00-1

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
bentazone (ISO), 3-isopropyl-2,1,3-benzothiadiazine-4-one-2,2-dioxide	(CAS No) 25057-89-0 (EC no) 246-585-8 (EC index no) 613-012-00-1	98	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412

Full text of H-phrases: see section 16

### 3.2. Mixture

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: Remove contaminated clothes. Wash skin with plenty of water. If skin irritation persists, take medical advice.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Call a poison center or a doctor if you feel unwell.

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

Symptoms/injuries after skin contact	: May cause an allergic skin reaction.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: Harmful if swallowed.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

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

Fire hazard	: Non flammable.
Explosion hazard	: No direct explosion hazard. Finely dispersed particles form explosive mixtures in air.

# Bentazone techn. min. 97%

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Hazardous decomposition products in case of fire : Carbon oxides (CO, CO<sub>2</sub>). Combustion generates : Nitrogen oxides (NO<sub>x</sub>). For further information, refer to section 10 : "Stability and Reactivity".

### 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Other information : Prevent fire-fighting water from entering environment.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

#### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. For further information refer to section 8 : "Exposure-controls/personal protection".

Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Do not allow to enter drains or water courses.

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

Methods for cleaning up : Recover mechanically the product. Avoid generation of dust.

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 8 : "Exposure-controls/personal protection". Concerning disposal elimination after cleaning, see item 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Concerning personal protective equipment to use, see item 8. Provide good ventilation in process area to prevent formation of vapour. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

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

Storage conditions : Keep only in the original container in a cool well ventilated place. Keep container closed when not in use.

Incompatible products : Strong oxidizers.

Heat and ignition sources : Keep away from heat and direct sunlight.

### 7.3. Specific end use(s)

Herbicide.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Personal protective equipment : Gloves. Safety glasses. Protective clothing. Dust formation: dust mask.

# Bentazone techn. min. 97%

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Hand protection	: Wear suitable gloves resistant to chemical penetration. Chemical resistant gloves (according to European standard NF EN 374 or equivalent). Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Since the product consists of several substances, it is not possible to estimate the durability of the glove material beforehand. Thus it needs to be tested before use. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection	: Safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. In case of inadequate ventilation wear respiratory protection. Dust formation: dust mask. In case of dust formation use respirator with filter:



Other information : Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystalline powder.
Colour	: Off-white. white to slightly yellow. Colourless.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 137 - 139 °C
Freezing point	: No data available
Boiling point	: 395,7 °C @ 760 mmHg
Flash point	: 191,3 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 0,00023998 Pa @ 25°C
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1,345 g/cm <sup>3</sup>
Solubility	: Water: 0,5 g/l Ethanol: 861 g/l Organic solvent: 18 g/100ml Chloroform
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under normal conditions of use.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known.

# Bentazone techn. min. 97%

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 10.4. Conditions to avoid

Extremely high or low temperatures. Keep out of direct sunlight.

### 10.5. Incompatible materials

Strong oxidizing agents.

### 10.6. Hazardous decomposition products

Combustion generates : Carbon oxides (CO, CO<sub>2</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

<b>bentazone (ISO), 3-isopropyl-2,1,3-benzothiadiazine-4-one-2,2-dioxide (25057-89-0)</b>	
LD50 oral rat	> 1000 mg/kg
LD50 dermal rat	2500 mg/kg/d
LC50 inhalation rat (mg/l)	5,1 mg/l/4h

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

<b>bentazone (ISO), 3-isopropyl-2,1,3-benzothiadiazine-4-one-2,2-dioxide (25057-89-0)</b>	
LC50 fishes 1	47,3 mg/l

### 12.2. Persistence and degradability

<b>Bentazone techn. min. 97% (25057-89-0)</b>	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

<b>Bentazone techn. min. 97% (25057-89-0)</b>	
Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

<b>Bentazone techn. min. 97% (25057-89-0)</b>	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

### 12.6. Other adverse effects

Additional information : Avoid release to the environment

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Additional information	: Empty containers should be taken for recycle, recovery or waste in accordance with local regulation.
Ecology - waste materials	: Avoid release to the environment.






# Bentazone techn. min. 97%

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
2588	2588	2588	2588	2588
<b>14.2. UN proper shipping name</b>				
PESTICIDE, SOLID, TOXIC, N.O.S.	PESTICIDE, SOLID, TOXIC, N.O.S.	Pesticide, solid, toxic, n.o.s.	PESTICIDE, SOLID, TOXIC, N.O.S.	PESTICIDE, SOLID, TOXIC, N.O.S.
<b>Transport document description</b>				
UN 2588 PESTICIDE, SOLID, TOXIC, N.O.S. (CONTAINS : bentazone (ISO), 3-isopropyl-2,1,3-benzothiadiazine-4-one-2,2-dioxide), 6.1, III, (E)	UN 2588 PESTICIDE, SOLID, TOXIC, N.O.S., 6.1, III			
<b>14.3. Transport hazard class(es)</b>				
6.1	6.1	6.1	6.1	6.1
				
<b>14.4. Packing group</b>				
III	III	III	III	III
<b>14.5. Environmental hazards</b>				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR)	: T7
Special provisions (ADR)	: 61, 274, 648
Limited quantities (ADR)	: 5kg
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P002, IBC08, LP02, R001
Special packing provisions (ADR)	: B3
Mixed packing provisions (ADR)	: MP10
Portable tank and bulk container instructions (ADR)	: T1
Portable tank and bulk container special provisions (ADR)	: TP33
Tank code (ADR)	: SGAH, L4BH
Tank special provisions (ADR)	: TU15, TE19
Vehicle for tank carriage	: AT
Transport category (ADR)	: 2
Special provisions for carriage - Bulk (ADR)	: VC1, VC2, AP7
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13, CV28
Special provisions for carriage - Operation (ADR)	: S9
Hazard identification number (Kemler No.)	: 60
Orange plates	:



Tunnel restriction code (ADR)	: E
EAC code	: 2X

#### - Transport by sea

Special provisions (IMDG)	: 61, 223, 274
---------------------------	----------------

# Bentazone techn. min. 97%

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Limited quantities (IMDG)	: 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P002, LP02
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: T1
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-A
Stowage category (IMDG)	: A
Stowage and segregation (IMDG)	: Clear of living quarters.
Properties and observations (IMDG)	: Solid pesticides present a very wide range of toxic hazard. Toxic if swallowed, by skin contact or by inhalation.
MFAG-No	: 151

### - Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y645
PCA limited quantity max net quantity (IATA)	: 10kg
PCA packing instructions (IATA)	: 670
PCA max net quantity (IATA)	: 100kg
CAO packing instructions (IATA)	: 677
CAO max net quantity (IATA)	: 200kg
Special provisions (IATA)	: A3, A5
ERG code (IATA)	: 6L

### - Inland waterway transport

Classification code (ADN)	: T7
Special provisions (ADN)	: 61, 274, 648, 82
Limited quantities (ADN)	: 5 kg
Excepted quantities (ADN)	: E1
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0

### - Rail transport

Classification code (RID)	: T7
Special provisions (RID)	: 61, 274, 648
Limited quantities (RID)	: 5kg
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P002, IBC08, LP02, R001
Special packing provisions (RID)	: B3
Mixed packing provisions (RID)	: MP10
Portable tank and bulk container instructions (RID)	: T1
Portable tank and bulk container special provisions (RID)	: TP33
Tank codes for RID tanks (RID)	: SGAH, L4BH
Special provisions for RID tanks (RID)	: TU15
Transport category (RID)	: 2
Special provisions for carriage – Bulk (RID)	: VW9
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW28, CW31
Colis express (express parcels) (RID)	: CE11, CE12
Hazard identification number (RID)	: 60

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

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

# Bentazone techn. min. 97%

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

No REACH Annex XVII restrictions

Bentazone techn. min. 97% is not on the REACH Candidate List

Contains no substance on the REACH candidate list

Bentazone techn. min. 97% is not on the REACH Annex XIV List

Contains no REACH Annex XIV substances

Type of product (Biocide)

Herbicide

### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Abbreviations and acronyms:

CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
RID	Regulations concerning the International Carriage of Dangerous Goods by Rai
LC50	Median lethal concentration
LD50	Median lethal dose
SDS	Safety Data Sheet
	CAS (Chemical Abstracts Service) number
	EG-nr.: EINECS- en ELINCS-number
	EINECS: European Inventory of Existing Commercial Substances

Data sources : according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830.

Other information : REACH Disclaimer:  
This information is based on current knowledge. Consistency of data in the SDS with CSR is considered, as far as the information is available at the time of compilation (cfr Revision date and Version number). **DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, Category 1
H302	Harmful if swallowed
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H412	Harmful to aquatic life with long lasting effects

Safety Data Sheet applicable for regions : GB - United Kingdom

This Safety Data Sheet is compiled by :

Trade Wind B.V. (info@twnl.com)

SDS EU (REACH Annex II)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*