

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## ENVOKE 75 WG

Version 8.0      Revision Date: 26.07.2017      SDS Number: S170033059      This version replaces all previous versions.

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

#### 1.1 Product identifier

Trade name : ENVOKE 75 WG  
Design code : A9842A

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

Use of the Substance/Mixture : Herbicide

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

Company : Syngenta Crop Protection AG  
Postfach  
CH-4002 Basel  
Switzerland  
Telephone : +41 61 323 11 11  
Telefax : +41 61 323 12 12  
E-mail address : sds.ch@syngenta.com

#### 1.4 Emergency telephone number

Emergency telephone number : +44 1484 538444

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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute aquatic toxicity, Category 1

H400: Very toxic to aquatic life.

Chronic aquatic toxicity, 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 : H410 Very toxic to aquatic life with long lasting effects.

Supplemental Hazard : EUH401 To avoid risks to human health and the



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for at least 15 minutes.  
Remove contact lenses.  
Immediate medical attention is required.

If swallowed : If swallowed, seek medical advice immediately and show this container or label.  
Do NOT induce vomiting.

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

Symptoms : No symptoms known or expected.

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

Treatment : There is no specific antidote available.  
Treat symptomatically.

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media : Extinguishing media - small fires  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  
Extinguishing media - large fires  
Alcohol-resistant foam  
or  
Water spray

Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

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

Specific hazards during firefighting : As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).  
Exposure to decomposition products may be a hazard to health.

### 5.3 Advice for firefighters

Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.

Further information : Do not allow run-off from fire fighting to enter drains or water courses.  
Cool closed containers exposed to fire with water spray.

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## SECTION 6: Accidental release measures

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

Personal precautions : Refer to protective measures listed in sections 7 and 8.  
Avoid dust formation.

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### 6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system. 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 : Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13). Do not create a powder cloud by using a brush or compressed air.  
Clean contaminated surface thoroughly.  
Clean with detergents. Avoid solvents.  
Retain and dispose of contaminated wash water.

### 6.4 Reference to other sections

For disposal considerations see section 13., Refer to protective measures listed in sections 7 and 8.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : This material is capable of forming flammable dust clouds in air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material. Electrical equipment should be compatible with the flammability characteristics of this material. The flammability characteristics will be made worse if the material contains traces of flammable solvents or is handled in the presence of flammable solvents.

Avoid contact with skin and eyes.  
When using do not eat, drink or smoke.  
For personal protection see section 8.

Dust explosion class : May form flammable dust-air mixture.

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

Requirements for storage areas and containers : Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.

Other data : Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

### 7.3 Specific end use(s)

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

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### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
trifloxysulfuron-sodium	199119-58-9	TWA	5 mg/m <sup>3</sup>	Syngenta

#### 8.2 Exposure controls

##### Engineering measures

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.

The extent of these protection measures depends on the actual risks in use.

Maintain air concentrations below occupational exposure standards.  
Where necessary, seek additional occupational hygiene advice.

##### Personal protective equipment

Eye protection : No special protective equipment required.

##### Hand protection

Remarks : No special protective equipment required.

Skin and body protection : No special protective equipment required.  
Select skin and body protection based on the physical job requirements.

Respiratory protection : No personal respiratory protective equipment normally required.  
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Protective measures : The use of technical measures should always have priority over the use of personal protective equipment.  
When selecting personal protective equipment, seek appropriate professional advice.

### SECTION 9: Physical and chemical properties

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

##### Appearance

: granules

Colour : light beige to brown

Odour : No data available

Odour Threshold : No data available

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pH : 8 - 12  
Concentration: 1 % w/v

**Melting point/range** : No data available

**Boiling point/boiling range** : No data available

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : May form combustible dust concentrations in air.

Burning number : 2 (20 °C)  
3 (100 °C)

Upper explosion limit : No data available

Lower explosion limit : No data available

Relative vapour density : No data available

Bulk density : 0.60 - 0.80 g/cm<sup>3</sup>

Solubility(ies)  
Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity  
Viscosity, dynamic : No data available

Explosive properties : Not explosive

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

### 9.2 Other information

Self-heating substances : The substance or mixture is not classified as self heating.

Surface tension : 55.4 mN/m, 20 °C

Dust explosion class : May form flammable dust-air mixture.

Minimum ignition energy : < 1,000 mJ

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

None reasonably foreseeable.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

### 10.4 Conditions to avoid

Conditions to avoid : No decomposition if used as directed.

### 10.5 Incompatible materials

Materials to avoid : None known.

### 10.6 Hazardous decomposition products

Combustion or thermal decomposition will evolve toxic and irritant vapours.

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Product:

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg  
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat, male and female): > 2.55 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute

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inhalation toxicity

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

### Components:

#### **trifloxysulfuron-sodium:**

Acute oral toxicity

: LD50 (Rat, male and female): > 5,000 mg/kg

Acute inhalation toxicity

: LC50 (Rat, male and female): > 5.03 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, male and female): > 2,000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

#### **sodium dibutyl-naphthalenesulphonate:**

Acute oral toxicity

: Assessment: The component/mixture is moderately toxic after single ingestion.

Acute inhalation toxicity

: Assessment: The component/mixture is moderately toxic after short term inhalation.

### **Skin corrosion/irritation**

#### Product:

Species: Rabbit

Result: No skin irritation

#### Components:

#### **trifloxysulfuron-sodium:**

Species: Rabbit

Result: No skin irritation

### **Serious eye damage/eye irritation**

#### Product:

Species: Rabbit

Result: No eye irritation

#### Components:

#### **trifloxysulfuron-sodium:**

Species: Rabbit

Result: No eye irritation

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### **sodium dibutylnaphthalenesulphonate:**

Result: Eye irritation

### **Respiratory or skin sensitisation**

#### **Product:**

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

#### **Components:**

### **trifloxysulfuron-sodium:**

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

### **Germ cell mutagenicity**

#### **Components:**

### **trifloxysulfuron-sodium:**

Germ cell mutagenicity-Assessment : Animal testing did not show any mutagenic effects.

### **Carcinogenicity**

#### **Components:**

### **trifloxysulfuron-sodium:**

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

### **Reproductive toxicity**

#### **Components:**

### **trifloxysulfuron-sodium:**

Reproductive toxicity - Assessment : No toxicity to reproduction

### **Repeated dose toxicity**

#### **Components:**

### **trifloxysulfuron-sodium:**

Remarks: No adverse effect has been observed in chronic toxicity tests.

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## **SECTION 12: Ecological information**

### **12.1 Toxicity**

#### **Product:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 146 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 139 mg/l  
Exposure time: 48 h

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Toxicity to algae : EbC50 (Pseudokirchneriella subcapitata (green algae)): 9.8 µg/l  
Exposure time: 72 h  
  
ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.043 mg/l  
Exposure time: 72 h

### Components:

#### **trifloxysulfuron-sodium:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 103 mg/l  
Exposure time: 96 h  
  
Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 108 mg/l  
Exposure time: 48 h  
  
Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.029 mg/l  
Exposure time: 72 h  
  
NOEC (Pseudokirchneriella subcapitata (green algae)): 0.00264 mg/l  
End point: Growth rate  
Exposure time: 72 h  
  
M-Factor (Acute aquatic toxicity) : 10  
  
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.55 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
  
M-Factor (Chronic aquatic toxicity) : 10

#### **sodium dibutylnaphthalenesulphonate:**

##### **Ecotoxicology Assessment**

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

### **12.2 Persistence and degradability**

#### Components:

#### **trifloxysulfuron-sodium:**

Biodegradability : Result: Not readily biodegradable.  
  
Stability in water : Degradation half life: 14 - 26 d  
Remarks: Product is not persistent.

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### 12.3 Bioaccumulative potential

#### Components:

##### **trifloxysulfuron-sodium:**

Bioaccumulation

: Remarks: Low bioaccumulation potential.

Partition coefficient: n-octanol/water

: log Pow: 1.4 (25 °C)

log Pow: -1.6 (25 °C)

log Pow: -0.42 (25 °C)

### 12.4 Mobility in soil

#### Components:

##### **trifloxysulfuron-sodium:**

Distribution among environmental compartments

: Remarks: Highly mobile in soils

Stability in soil

: Dissipation time: 5 - 13 d  
Percentage dissipation: 50 % (DT50)  
Remarks: Product is not persistent.

### 12.5 Results of PBT and vPvB assessment

#### Product:

Assessment

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

#### Components:

##### **trifloxysulfuron-sodium:**

Assessment

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

### 12.6 Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product

: Do not contaminate ponds, waterways or ditches with chemical or used container.  
Do not dispose of waste into sewer.  
Where possible recycling is preferred to disposal or incineration.  
If recycling is not practicable, dispose of in compliance with

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local regulations.

Contaminated packaging : Empty remaining contents.  
Triple rinse containers.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.  
Do not re-use empty containers.

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### SECTION 14: Transport information

#### 14.1 UN number

**ADN** : UN 3077  
**ADR** : UN 3077  
**RID** : UN 3077  
**IMDG** : UN 3077  
**IATA** : UN 3077

#### 14.2 UN proper shipping name

**ADN** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(TRIFLOXYSULFURON-SODIUM)  
**ADR** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(TRIFLOXYSULFURON-SODIUM)  
**RID** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(TRIFLOXYSULFURON-SODIUM)  
**IMDG** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(TRIFLOXYSULFURON-SODIUM)  
**IATA** : Environmentally hazardous substance, solid, n.o.s.  
(TRIFLOXYSULFURON-SODIUM)

#### 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 : M7  
Hazard Identification Number : 90  
Labels : 9

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### ADR

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

### RID

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

### IMDG

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

### IATA (Cargo)

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

### IATA (Passenger)

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

## 14.5 Environmental hazards

### ADN

Environmentally hazardous : yes

### ADR

Environmentally hazardous : yes

### RID

Environmentally hazardous : yes

### IMDG

Marine pollutant : yes

### IATA (Passenger)

Marine pollutant : yes

### IATA (Cargo)

Marine pollutant : yes

## 14.6 Special precautions for user

Not applicable

## 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

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## SECTION 15: Regulatory information

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

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals

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

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

Regulation (EC) No 850/2004 on persistent organic pollutants : 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	Quantity 1 100 t	Quantity 2 200 t
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Other regulations:

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

### 15.2 Chemical safety assessment

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

## SECTION 16: Other information

### Full text of H-Statements

H302 : Harmful if swallowed.  
H315 : Causes skin irritation.  
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.  
H412 : Harmful to aquatic life with long lasting effects.

### Full text of other abbreviations

Acute Tox. : Acute toxicity  
Aquatic Acute : Acute aquatic toxicity  
Aquatic Chronic : Chronic aquatic toxicity  
Eye Irrit. : Eye irritation  
Skin Irrit. : Skin irritation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; 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 associated with x% growth rate response; GHS - Globally

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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; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

### Further information

#### Classification of the mixture:

Aquatic Acute 1	H400
Aquatic Chronic 1	H410

#### Classification procedure:

Based on product data or assessment
Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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