



Safety Data Sheet

Safety Data Sheet in accordance with Regulation (EC) No. 1907/2006, as amended.

Date of issue: 27/06/2013 Revision date: 27/06/2013 Supersedes: 14/12/2009 Version: 7.0

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

1.1. Product identifier

 Product form
 : Substance

 Trade name
 : FLUTAMIDE CRS

 EC no
 : 236-341-9

 CAS No
 : 13311-84-7

 Product code
 : F0285600

Other means of identification : RTECS No : UG5700000

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

1.2.1. Relevant identified uses

Main use category : The product is intended for research, analysis and scientific education.

Use of the substance/mixture : For professional use only Function or use category : Laboratory chemicals

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

European Directorate for the Quality of Medicines & Healthcare EDQM, Council of Europe F-67081 Strasbourg

T +33(0)388412035 - F +33(0)388412771

1.4. Emergency telephone number

Emergency number : +44(0)1235239670

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

 Repr. 1B
 H360F

 Acute Tox. 4 (Inhalation)
 H332

 Acute Tox. 4 (Oral)
 H302

 Carc. 2
 H351

 Repr. 2
 H361d

 Eye Irrit. 2
 H319

 Aquatic Chronic 2
 H411

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

Carc.Cat.3; R40 Repr.Cat.2; R60 Repr.Cat.3; R63 Xn; R20/22 Xi; R36

N; R51/53

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

09/08/2013 EN (English) 1/8

Safety Data Sheet

Safety Data Sheet in accordance with Regulation (EC) No. 1907/2006, as amended.

2.2. Label elements

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

Hazard pictograms (CLP)







: Danger

Signal word (CLP)

H302 - Harmful if swallowed Hazard statements (CLP) H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H351 - Suspected of causing cancer

H360F - May damage fertility

H361d - Suspected of damaging the unborn child H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (CLP)

P201 - Obtain special instructions before use

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

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P264 - Wash hands and other exposed areas thoroughly after handling

P273 - Avoid release to the environment

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P301+P312 - IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable

for breathing

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing

P308+P313 - IF exposed or concerned: Get medical advice/attention P312 - Call a POISON CENTER/doctor/physician if you feel unwell P330 - Rinse mouth

P337+P313 - If eye irritation persists: Get medical advice/attention

P391 - Collect spillage

P501 - Dispose of contents/container to : Hazardous waste. Comply with applicable regulations

Other hazards

Other hazards not contributing to the classification

: Exposure may produce an allergic reaction.

SECTION 3: Composition/information on ingredients

Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC
FLUTAMIDE (Main constituent)	(CAS No)13311-84-7 (EC no)236-341-9	≤100	Carc.Cat.3; R40 Repr.Cat.2; R60 Repr.Cat.3; R63 Xn; R20/22 Xi; R36 N; R51/53

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
FLUTAMIDE (Main constituent)	(CAS No)13311-84-7 (EC no)236-341-9	≤100	Repr. 1B, H360F Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Oral), H302 Carc. 2, H351 Repr. 2, H361d Eye Irrit. 2, H319 Aquatic Chronic 2, H411

Full text of R-, H- and EUH-phrases: see section 16

Mixture

Not applicable

09/08/2013 EN (English) 2/8

Safety Data Sheet

Safety Data Sheet in accordance with Regulation (EC) No. 1907/2006, as amended.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

: If you feel unwell, seek medical advice (show the label where possible). Delayed adverse effects possible. Active component. Pharmaceuticals. For further information refer to Summary of Product Characteristics.

First-aid measures after inhalation

: Move to fresh air in case of accidental inhalation. Assure fresh air breathing. Obtain medical attention if breathing difficulty persists.

First-aid measures after skin contact

: Rinse skin with water/shower. Wash with plenty of soap and water.

First-aid measures after eye contact

: Rinse with water while holding the eyes wide open. Contact lenses should be removed. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion

: Rinse mouth out with water. The following symptoms may occur: (see section(s): 2, 4.2). If you feel unwell, seek medical advice. Prolonged medical observation may be indicated. (see section(s): 4.3). The affected person must rest and be kept under medical observation.

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

Symptoms/injuries

: See Heading 2. Immune system disorders. Blood and lymphatic system disorders. Neoplasms benign, malignant and unspecified (incl cysts and polyps). nausea, vomiting.

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

In all cases of doubt, or when symptoms persist, seek medical attention. If possible show this sheet, if not available show packaging or label. If the occupational exposure limit is exceeded: Specific medical surveillance.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

: Small amounts: Use extinguishing media appropriate for surrounding fire. Extinguishing blanket. Carbon dioxide. Dry powder. Large amounts: Not applicable.

Unsuitable extinguishing media

: Water may be ineffective in firefighting due to low solubility.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Precautionary measures fire

: Small amounts: Use normal individual fire protective equipment. Large amounts: Not applicable

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

: Avoid raising dust. Wear suitable protective clothing, gloves and eye or face protection. Avoid any direct contact with the product. Evacuate unnecessary personnel. Large amounts: Not applicable.

6.1.1. For non-emergency personnel

Protective equipment

: See Headings 7 and 8.

Emergency procedures

: Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection. Wear suitable protective clothing and gloves.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

: Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Ensure waste is collected and contained. Clean thoroughly. Poorly soluble in water. Clean with the help of detergents. Collect all waste in suitable and labelled containers and dispose according to local legislation. Wash the non-recoverable remainder with: Sodium hypochlorite solution.

6.4. Reference to other sections

(see section(s): 8, 13).

09/08/2013 EN (English) 3/8

Safety Data Sheet

Safety Data Sheet in accordance with Regulation (EC) No. 1907/2006, as amended.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed

: Small amounts: See Heading 1. When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us. The attention of the user is drawn to the risks possibly incurred by using the product for any other purpose than that for which it was intended. Avoid contact during pregnancy/while nursing.

Precautions for safe handling

: Handle and open container with care. See Heading 8. Do not handle until all safety precautions have been read and understood. Avoid any direct contact with the product. Obtain special instructions before use.

Hygiene measures

: Handle in accordance with good industrial hygiene and safety procedures. Small amounts: Material should be handled in a laboratory hood whenever possible.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Comply with applicable regulations.

Storage conditions

: To guarantee the quality and properties of the product, keep: dry, Keep in a cool, well-ventilated place away from heat. Store in original container. Store according to local legislation.

Incompatible products : Strong oxidizing agents.

7.3. Specific end use(s)

See Heading 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls

: Material should be handled in a laboratory hood whenever possible.

Personal protective equipment

: Gloves. Safety glasses. Protective clothing. Dust production: dust mask with filter type P3.



Hand protection

: Gloves. Chemical resistant PVC gloves (to European standard EN 374 or equivalent).

Eye protection

: Wear eye protection. DIN EN 166.

Skin and body protection

: Lab coat. Wear suitable protective clothing. DIN EN 13034.

Respiratory protection

: Quarter mask (DIN EN 140). Wear appropriate breathing apparatus if air renewal not sufficient to maintain dust/vapour under TLV.

09/08/2013 EN (English) 4/8

Safety Data Sheet

Safety Data Sheet in accordance with Regulation (EC) No. 1907/2006, as amended.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

: Solid Physical state

: Crystalline powder. light yellow. Powder. Appearance

Colour No data available

Odour Not applicable. See Heading 2, 4.2, 8.

Odour threshold No data available No data available pΗ Relative evaporation rate (butylacetate=1) No data available

Melting point 112 °C

Freezing point : No data available **Boiling point** : No data available : No data available Flash point Self ignition temperature No data available Decomposition temperature No data available Flammability (solid, gas) No data available No data available Vapour pressure Relative vapour density at 20 °C No data available Relative density No data available

Solubility Acetone. Tetrahydrofurane.

Water: < 1 mg/l

Log Pow : 3,005 at 20°C Log Kow : 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

Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

Chemical stability 10.2.

No additional information available

10.3. Possibility of hazardous reactions

Small amounts: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us. Large amounts: Not applicable.

Conditions to avoid

No additional information available

10.5. Incompatible materials

Small amounts: None under normal use. Large amounts: Not applicable.

Hazardous decomposition products

When heated to decomposition, emits dangerous fumes. Large amounts: Not applicable.

SECTION 11: Toxicological information

Information on toxicological effects 11.1.

Acute toxicity : Harmful if inhaled. Harmful if swallowed.

FLUTAMIDE CRS(13311-84-7)		
LD50 oral rat	787 mg/kg	
ATE (oral)	500,000 mg/kg	
Skin corrosion/irritation	: Not classified	

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Not classified

09/08/2013 EN (English) 5/8

Safety Data Sheet

Safety Data Sheet in accordance with Regulation (EC) No. 1907/2006, as amended.

Germ cell mutagenicity : Not classified

Carcinogenicity : Suspected of causing cancer.

Reproductive toxicity : May damage fertility. Suspected of damaging the unborn child.

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and

symptoms

: Avoid any direct contact with the product. Small amounts: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us. See first aid section of this material safety data sheet. Large amounts: Not applicable.

SECTION 12: Ecological information

Toxicity

Ecology - general

Small amounts: See Heading 2. Poorly soluble in water. No data available on ecotoxicity. Hazardous waste. Use suitable disposal containers. Large amounts: Not applicable.

FLUTAMIDE CRS(13311-84-7)	
LC50 fishes 1	> 1000 mg/l LC50-96 Hour - fish
EC50 Daphnia 1	1,38 mg/l EC50 - 48 Hour - Daphnia magna

12.2. Persistence and degradability

No additional information available

12.3. **Bioaccumulative potential**

FLUTAMIDE CRS(13311-84-7)	
Log Pow	3,005 at 20°C

Mobility in soil

No additional information available

Results of PBT and vPvB assessment

No additional information available

Other adverse effects 12.6.

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Dispose in a safe manner in accordance with local/national regulations.

Waste disposal recommendations Do not empty into drains, dispose of this material and its container at hazardous or special

waste collection point.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

UN number 14.1.

UN-No : 3077 UN-No.(IATA) : 3077 UN-No. (IMDG) : 3077

14.2. **UN** proper shipping name

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

: UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III, (E) Transport document description

14.3. Transport hazard class(es)

Class (UN) : 9 Class (IATA) : 9 Class (IMDG) : 9

14.4. **Packing group**

Packing group (UN) : 111 Packing group (IMDG) : 111

09/08/2013 EN (English) 6/8

Safety Data Sheet

Safety Data Sheet in accordance with Regulation (EC) No. 1907/2006, as amended.

14.5. Environmental hazards

Dangerous for the environment



Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 90
Classification code (UN) : M7

Orange plates

90 3077

Tunnel restriction code : E
LQ : LQ27
Excepted quantities (ADR) : E1

14.6.2. Transport by sea

Ship Safety Act : Miscellaneous dangerous substances & articles

MFAG-No : 171

14.6.3. Air transport

Civil Aeronautics Law : Miscellaneous dangerous substances & articles

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

No REACH Annex XVII restrictions

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

09/08/2013 EN (English) 7/8

Safety Data Sheet
Safety Data Sheet in accordance with Regulation (EC) No. 1907/2006, as amended.

Full text of R-, H- and EUH-phrases::

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2
H302	Harmful if swallowed
H319	Causes serious eye irritation
H332	Harmful if inhaled
H351	Suspected of causing cancer
H360F	May damage fertility
H361d	Suspected of damaging the unborn child
H411	Toxic to aquatic life with long lasting effects
R20/22	Harmful by inhalation and if swallowed
R36	Irritating to eyes
R40	Limited evidence of a carcinogenic effect
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R60	May impair fertility
R63	Possible risk of harm to the unborn child
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful

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

09/08/2013 EN (English) 8/8