

CLAYTON PLANT PROTECTION

CLAYTON KIBO Safety Data Sheet according to Regulation (EC) No. 1907/2006 and Regulation (EU) No. 453/2010. Version 1/dsc 16/01/2015. This version replaces all previous versions.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name : CLAYTON KIBO

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

Use : Herbicide

1.3 Details of the supplier of the safety data sheet

Clayton Plant Protection (UK) Ltd., Bracetown Business Park, Clonee, Dublin15. Ireland.
Tel: (00 353) 1 8210127 www.cpp.ag Email: info@cpp.ag

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EU) 1272/2008

Acute toxicity (Oral)	Category 4	H302
Acute aquatic toxicity	Category 1	H400
Chronic aquatic toxicity	Category 1	H410


For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xn	Harmful
N	Dangerous for the environment
R22	Harmful if swallowed
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling: Regulation (EC) No. 1272/2008



Hazard pictograms	
	
Signal Word	:Warning
Hazard Statements	:H302 Harmful if swallowed :H410 Very toxic to aquatic life with long lasting effects
Precautions Statements	:P102 Keep out of reach of children :P270 Do not eat, drink or smoke when using this product :P301/P312 IF SWALLOWED: Call a POISON CENTRE or doctor/ physician if you feel unwell :P330 Rinse mouth. :P391 Collect spillage :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.
Supplemental Information	:EUH401 To avoid risks to human health and the environment comply with the instructions for use.

Hazardous components which must be listed on the label: prosulfuron

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Labelling: EU Directives 67/548/EEC or 1999/45/EC

Symbol(s)	
	
Harmful	Dangerous for the environment
R-phrase(s)	:R22 Harmful if swallowed :R51/53 Toxic to aquatic organisms may cause long term adverse effects in the aquatic environment.
S-phrase(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. :S35 This material and its container must be disposed of in a safe way. :S57 Use appropriate containment to avoid environmental contamination.
Special labelling of certain mixtures	To avoid risks to man and the environment, comply with instructions for use.

Hazardous components which must be listed on the label: prosulfuron

2.3 Other hazards : May form flammable dust-air mixture.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

Chemical Name	CAS No. EC No. Registration Number	Classification (67/548/EEC)	Classification (REGULATION (EC) No. 1272/2008)	Concentration
prosulfuron	94125-34-5	Xn, N R22 R50/53	Acute Tox.4; H302 Aquatic Acute1; H400 Aquatic Chronic1; H410	75 % w/w
sodium dibutyl-naphthalene-sulphonate	25417-20-3 246-960-6	Xn R20/22 R36/38 R52/53	Acute Tox.4; H302 Acute Tox.4; H332 Skin Irrit.2; H315 Eye Irrit.2; H319 Aquatic Chronic3; H412	1 – 5 % w/w

Substances for which there are Community workplace exposure limits.

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

- General Advice : Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control centre or physician, or going for treatment.
- Inhalation : Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poison Control Centre immediately.
- Skin Contact : Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.
- Eye Contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.
- Ingestion : 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 information available.

4.3 Indication of any immediate medical attention and special treatment needed

Medical advice : There is no specific antidote available. Treat symptomatically.

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SECTION 5. FIREFIGHTING MEASURES

- 5.1 Extinguishing media**
Extinguishing media - small fires
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Extinguishing media - large fires
Use alcohol-resistant foam or water spray.
Do not use a solid water stream as it may scatter and spread fire.
- 5.2 Special hazards arising from the substance or mixture**
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 fire-fighters:**
Wear full protective clothing and self-contained breathing apparatus. Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures**
Refer to protective measures listed in sections 7 and 8. Avoid dust formation.
- 6.2 Environmental precautions:**
Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
- 6.3 Methods and materials for containment and 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. If the product contaminates rivers and lakes or drains inform respective authorities.
- 6.4 Reference to other sections**
Refer to protective measures listed in sections 7 and 8.
Refer to disposal considerations listed in section 13.

SECTION 7. HANDLING AND STORAGE

- 7.1 Precautions for 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. This material can become readily charged in most operations. Avoid contact with skin and eyes. When using, do not eat, drink or smoke. For personal protection see section 8.
- 7.2 Conditions for safe storage, including any incompatibilities**
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 feeding stuffs.
- 7.3 Specific end use(s)**
Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	Exposure limit(s)	Type of exposure limit	Source
Prosulfuron	4 mg/m ³	8 h TWA	SYNGENTA

8.2 Exposure controls

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation and packaging of the product.

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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. If airborne dust is generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Where necessary, seek additional occupational hygiene advice.
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. Personal protective equipment should be certified to appropriate standards.
Respiratory protection	:	No personal respiratory protective equipment normally required. A particulate filter respirator may be necessary until effective technical measures are installed.
Hand protection	:	Chemical resistant gloves are not usually required. Select gloves based on the physical job requirements.
Eye Protection	:	Eye protection is not usually required. Follow any site specific eye protection policies.
Skin and body protection	:	No special protective equipment required. Select skin and body protection based on the physical job requirements.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State	:	Solid
Form	:	Granules
Colour	:	Tan to brownish
Odour	:	Sweetish
Odour Threshold	:	No data available
pH	:	5 – 8 at 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)	:	Not highly flammable
Lower explosion limit	:	No data available
Upper explosion limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Density	:	No data available
Solubility in other solvents	:	No data available
Partition Coefficient n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Thermal decomposition	:	No data available
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	Not oxidising

9.2 Other information

Dust explosion class	:	Forms flammable dust clouds
Minimum ignition energy	:	>0.3 – 1 J < 1 J
Bulk density	:	0.4 – 0.7 g/cm ³
Miscibility	:	miscible

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity	:	No information available
10.2 Chemical Stability	:	No information available
10.3 Possibility of hazardous reactions	:	Stable at normal ambient temperature and pressure. Hazardous polymerisation does not occur.
10.4 Conditions to avoid	:	No information available
10.5 Incompatible materials	:	No information available
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 oral toxicity	:	LD50 male and female rat, 1,000 – 2,000 mg/kg
Acute inhalational toxicity	:	Acute toxicity estimate, > 5.0 mg/l
Acute dermal toxicity	:	LD50 rat, > 2,000 mg/kg
Skin corrosion/irritation	:	Rabbit: non-irritating
Serious eye damage/eye irritation	:	Rabbit: non-irritating
Respiratory or skin sensitisation	:	Buehler Test guinea pig: not sensitising
Germ cell mutagenicity prosulfuron	:	Did not show mutagenic effects in animal experiments.
Carcinogenicity prosulfuron	:	Did not show carcinogenic effects in animal experiments.
Teratogenicity prosulfuron	:	Did not show teratogenic effects in animal experiments.
Reproductive toxicity prosulfuron	:	Did not show reproductive toxicity effects in animal experiments.
STOT – repeated exposure prosulfuron	:	No adverse effect has been observed in chronic toxicity tests.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	:	LC50 <i>Oncorhynchus mykiss</i> (rainbow trout), > 100 mg/l, 96 h
Toxicity to aquatic invertebrates	:	EC50 <i>Daphnia magna</i> (water flea), > 100 mg/l, 48 h
Toxicity to aquatic plants	:	EbC50 <i>Desmodesmus subspicatus</i> (green algae), 3.2 mg/l, 72 h

12.2 Persistence and degradability

Biodegradability	:	Prosulfuron is not biodegradable
Stability in water prosulfuron	:	Degradation half-life: 45 – 60 d. Not persistent in water
Stability in soil prosulfuron	:	Degradation half-life: 11 d. Not persistent in soil

12.3 Bioaccumulative potential

prosulfuron : Low potential for bioaccumulation.

12.4 Mobility in soil

prosulfuron : High mobility in soil.

12.5 Results of PBT and vPvB assessment

prosulfuron : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).
This substance is not considered to be very persistent nor very bioaccumulating vPvB).

12.6 Other adverse effects

Other information : Classification of the product is based on the summation of the concentrations of classified components.

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 local regulations.
Contaminated packaging	:	Empty remaining contents. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Land transport (ADR/RID)

14.1	UN Number	:	UN 3077
14.2	UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PROSULFURON)
14.3	Transport hazard class(es)	:	9
14.4	Packing Group	:	III
Labels		:	9
14.5	Environmental hazards	:	Environmentally hazardous

Sea transport (IMDG)

14.1	UN Number	:	UN 3077
14.2	UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PROSULFURON)
14.3	Transport hazard class(es)	:	9
14.4	Packing Group	:	III
Labels		:	9
14.5	Environmental hazards	:	Marine pollutant

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Air transport (IATA-DGR)


14.1	UN Number	:	UN 3077
14.2	UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PROSULFURON)
14.3	Transport hazard class(es)	:	9
14.4	Packing Group	:	III
Labels		:	9
14.6	Special precautions for user	:	none

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

GHS-Labeling

Hazard pictograms	
	
Signal Word	:Warning
Hazard Statements	:H302 Harmful if swallowed :H410 Very toxic to aquatic life with long lasting effects
Precautions Statements	:P102 Keep out of reach of children :P270 Do not eat, drink or smoke when using this product :P301/P312 IF SWALLOWED: Call a POISON CENTRE or doctor/ physician if you feel unwell :P330 Rinse mouth. :P391 Collect spillage :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.
Supplemental Information	:EUH401 To avoid risks to human health and the environment comply with the instructions for use.

Hazardous components which must be listed on the label: prosulfuron

15.2 Chemical Safety Assessment : A Chemical Safety Assessment is not required for this substance.

SECTION 16. OTHER INFORMATION

Further information

Approval number, MAPP 15822.

Use plant protection products safely. Always read the label and product information before use.

Full text of R-phrases referred to under sections 2 and 3:

- R20/22 Harmful by inhalation and if swallowed
- R22 Harmful if swallowed
- R36/38 Irritating to eyes and skin
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Full text of H-Statements referred to under sections 2 and 3.

- 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.
- H411 Toxic to aquatic life with long lasting effects
- H412 Harmful to aquatic life with long lasting effects

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 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. This version replaces all previous versions.