CLAYTON PLANT PROTECTION

CLAYTON ABBA Safety Data Sheet according to Regulation (EU) No. 453/2010. Version 1/dsc 30/04/2015 This version replaces all previous versions

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

1.1 Product Identifier Product Name : CLAYTON ABBA

1.2 Relevant Identified Uses of the substance or mixture and uses advised against Use : Insecticide

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

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EU) 1272/2008	Classification according to EU Directives 67/548/EEC or 1999/45/EC
Acute toxicity (oral) Category 4 H302 Eye Irritation Category 2 H319 Specific target organ toxicity – repeated exposure Category 2 H373 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.	Xn Harmful N Dangerous for the environment R22 Harmful if swallowed R48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. R50/53 Very 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
H319 Causes serious eye irritation
H373 May cause damage to the nervous system through prolonged or repeated exposure
H410 Very toxic to aquatic life with long lasting effects.

Precautions Statements :
P102 Keep out of reach of children. :
P260 Do not breathe dust/fume/gas/mist/vapours/spray :
P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and esy to do. Continue rinsing. :
P314 Get medical advice/attention if you feel unwell. :
P391 Collect spillage.

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: Abamectin cyclohexanol

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

Symbol(s)

Harmful Dangerous for the environment

R-phrase(s) :
R22 Harmful if swallowed :
R48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. :
R50/53 Very 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 feedingstuffs. :
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: Abamectin cyclohexanol

2.3 Other hazards : None known

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous Component(s)

Chemical Name	CAS No EC No Registration Number	Classification (67/548/EEC)	Classification (REGULATION (EC) No. 1272/2008 .	Concentration
Cyclohexanol	108-93-0 203-630-6 01-2119447488-26-0 002	Xn R20/22 R37/38	Acute Tox.4; H302 Acute Tox.4; H332 Skin Irrit.2; H315 Eye Irrit.2; H319 STOT SE3; H335	50-70 % w/w
Propane-1,2-diol	57-55-6 200-338-0	-	-	10-20 % w/w
Abamectin	71751-41-2 65195-56-4 65195-55-3	T+, N R63 R21 R26/28 R48/23/25 R50/53	Repr.2; H361d Acute Tox.2; H300 Acute Tox.3; H311 STOT RE1; H372 Acute Tox.1; H330 Aquatic Acute 1; H400 Aquatic Chronic1; H410	1.8 % w/w
2,6-di-tert-butyl-pcresol	128-37-0 31194-40-8 204-881-4 01-2119555270-46-0 000	N R50/53	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	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.

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 : Lack of co-ordination Tremors Dilatation of the pupil
4.3 Indication of any immediate medical attention and special treatment needed
Medical advice : This material is believed to enhance GABA activity in animals. It is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiaziphines, valproic acid) in patients with potentially toxic mectin exposure. Toxicity can be minimized by early administration of chemical absorbents (e.g. activated charcoal). If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parental fluid replacement therapy should be given, along with other required supportive measures as indicated by clinical signs, symptoms and measurements.

5. FIRE-FIGHTING 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.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures Refer to protective measures listed in sections 7 and 8.
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 and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). 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.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling : No special protective measures against fire required. 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 : No special storage conditions required. 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 uses : Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Components	Exposure limit(s)	Type of exposure limit	Source
Abamectin	0.02 mg/m³	8 h TWA	SYNGENTA
Propane-1,2-diol	10 mg/m³ (particulates) 150 ppm, 470 mg/m³ (Total (vapour and particulates))	8 h TWA 8 h TWA	UK HSE UK HSE
Cyclohexanol	50 ppm 50 ppm 50 ppm 50 ppm, 208 mg/m³	8 h TWA 8 h TWA 8 h TWA 15 min STEL 8 h TWA	ACGIH DFG SUVA SUVA UK HSE
22,6-di-tert-butyl-p-cresol	10 mg/m³ 10 mg/m³ 10 mg/m³ 10 mg/m³	8 h TWA 8 h TWA 8 h TWA 8 h TWA	DFG SUVA ACGIH UK HSE

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation and packaging of the product.
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. If airborne mists or vapours are generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. If 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. Use 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State : Liquid Form :	Vapour pressure : No data available
Liquid Colour : Pale yellow to brown	Relative vapour density : No data available
Odour : Aromatic Odour	Density : 0.98 g/cm³
Threshold : No data available	Solubility in other solvents : No data available
pH : 3.2 at 1.0 % w/v (25 °C)	Partition Coefficient n-octanol/water : No data available
Melting point/range : No data available	Autoignition temperature : No data available
Boiling point/boiling range : No data available	Thermal decomposition : No data available
Flash point : 69 °C Pensky-Martens c.c.	Viscosity, dynamic : No data available
Evaporation rate : No data available	Viscosity, kinematic : No data available
Flammability (solid, gas) : No data available	Explosive properties : Not explosive
Lower explosion limit : No data available	Oxidizing properties : Not oxidising
Upper explosion limit : No data available	9.2 Other Information : No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity : No information available
10.2 Chemical Stability : No information available
10.3 Possibility of hazardous reactions : None known. 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.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity :	LD50 female rat, 891 mg/kg The toxicological data has been taken from products of similar composition.
Acute inhalational toxicity	LC50 male and female rat, > 5.04 mg/l, 4 h The toxicological data has been taken from products of similar composition
Acute dermal toxicity	LD50 male and female rat, > 5,050 mg/kg The toxicological data has been taken from products of similar composition
Skin corrosion/irritation	Rabbit: non-irritating. The toxicological data has been taken from products of similar composition
Serious eye damage/eye irritation	Rabbit: moderately irritating The toxicological data has been taken from products of similar composition.
Respiratory or skin sensitisation	Guinea pig: not a skin sensitiser in animal tests. The toxicological data has been taken from products of similar composition
Germ cell mutagenicity Abamectin	Did not show mutagenic effects in animal experiments.
Carcinogenicity Abamectin	Did not show carcinogenic effects in animal experiments.
Reproductive toxicity Abamectin	Experiments have shown reproductive toxicity effects on laboratory animals.
STOT – repeated exposure Abamectin	Central nervous system effects in chronic/subchronic animal tests.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	LC50 Oncorhynchus mykiss (rainbow trout), 0.247 mg/l, 96 h
Toxicity to aquatic invertebrates	EC50 Daphnia magna (water flea), 0.095 mg/l, 48 h
Toxicity to aquatic plants	EbC50 Pseudokirchneriella subcapitata (green algae), 80 mg/ml, 72 h ErC50 Pseudokirchneriella subcapitata (green algae), > 100mg/l, 72 h. Based on test results obtained with similar product.

12.2 Persistence and degradability
Stability in water abamectin : Degradation half life: 1.7 d Not persistent in water
Stability in soil abamectin : Degradation half life: 12 – 52 d Not persistent in soil
12.3 Bioaccumulative potential abamectin : Does not bioaccumulate.
12.4 Mobility in soil abamectin : The substance has slight mobility in soil.
12.5 Results of PBT and vPvB assessment abamectin :
This substance is not considered to be persistent, bioaccumu-lating nor toxic (PBT).
12.6 Other adverse effects None known

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.

14. TRANSPORT INFORMATION

Land transport (ADR/RID)
14.1 UN Number : UN 3082
14.2 UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ABAMECTIN)
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 3082
14.2 UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ABAMECTIN)
14.3 Transport hazard class(es) : 9
14.4 Packing Group ; III Labels : 9
14.5 Environmental hazards : Marine pollutant
Air transport (IATA-DGR)
14.1 UN Number : UN 3082
14.2 UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ABAMECTIN)
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

15. REGULATORY INFORMATION

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

Hazard pictograms

Signal Word :Warning

Hazard Statements :
H302 Harmful if swallowed
H319 Causes serious eye irritation
H373 May cause damage to the nervous system through prolonged or repeated exposure
H410 Very toxic to aquatic life with long lasting effects.

Precautions Statements :
P102 Keep out of reach of children. :
P260 Do not breathe dust/fume/gas/mist/vapours/spray :
P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and esy to do. Continue rinsing. :
P314 Get medical advice/attention if you feel unwell. :
P391 Collect spillage.

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: Abamectin cyclohexanol

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

16. OTHER INFORMATION

Approval number, MAPP 13808. Use plant protection products safely. Always read the label and product information before use.
Full text of R phrases referred to under Section 2 and 3: R20/22 Harmful by inhalation and if swallowed R21 Harmful in contact with skin R26/28 Very toxic by inhalation and if swallowed R37/38 Irritating to respiratory system and skin R48/23/25 Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R63 Possible risk of harm to the unborn child
Full text of H-statements referred to under sections 2 and 3: H300 Fatal if swallowed H302 Harmful if swallowed H311 Toxic in contact with skin H315 Causes skin irritation H319 Causes serious eye irritation H330 Fatal if inhaled H332 Harmful if inhaled H335 May cause respiratory irritation H361d Suspected of damaging the unborn child H372 Causes damage to the nervous system through prolonged or repeated exposure H373 May cause damage to the nervous system through prolonged or repeated exposure H400 Very toxic to aquatic life. H410 Very toxic 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 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.