Section 1: Identification of the substance/mixture and of the company/undertaking
1.1 Product identifier: Product name : Clayton Artefact . Product type : Mixture 1.2
Relevant identified uses of the substance or mixture and uses advised against:
Relevant identified uses: Crop protection insecticide
1.3 Details of the supplier of the safety data sheet:
Clayton Plant Protection Ltd., Bracetown Business Park, Clonee, Dublin15. Ireland.
Tel: (00 353) 1 8210127 www.claytonpp.com Email: info@claytonpp.com
1.4 In the event of an emergency, call the NHS 111

Section 2: Hazards Identification 2.1 Classification of the substance or mixture
Short-term (acute) aquatic hazard (Category 1), H400
Long-term (chronic) aquatic hazard (Category 1), H410

2.2 Label elements

Signal word: WARNING

Hazard statement(s)
H410: Very toxic to aquatic life with long lasting effects. –
Precautionary statement(s) P391: Collect spillage.
P501: Dispose of contents/ container to a licensed waste disposal contractor or collection site except for empty clean triple rinsed containers which can be disposed as non-hazardous waste
2.3. Other hazards
No data available

Section 3 Composition/Information on Ingredients

Composition	CAS No.	Content, g/l w/v
Spinosad	168316-95-8	480
Others	/	Up to 1L

Note: Spinosad is comprised of Spinosyn A (CAS No. 131929-60-7) and Spinosyn D (CAS No. 131929-63-0)

Section 4: First Aid Measure
4.1 Description of first aid measures
General advice: If potential for exposure exists refer to Section 8 for specific personal protective.
Eye contact: Check and remove contact lenses. Flush eyes with running water for at least 15 minutes separating eyelids. Seek medical attention immediately.
Skin contact: Wash with abundant soap and water. Remove contaminated clothing and shoes. Seek medical attention immediately.
Inhalation: Remove from exposure and transfer to fresh air. If breathing is difficult, administer oxygen. If breathing stops, administer artificial respiration.
Seek medical attention immediately. Physician or poison control immediately.
Ingestion: No emergency medical treatment necessary
4.2 Most important symptoms and effects, both acute and delayed:
Aside from the information found under description of first aid measures (above) and indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology information.
4.3 Indication of any immediate medical attention and special treatment needed
Notes to physician: There is no special antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the safety data sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment

Section 5: Fire-fighting Measures
5.1 Extinguishing media:
Suitable extinguishing media: Water fog, Carbon dioxide, dry chemical or foam.
Unsuitable extinguishing media: No data available.

5.2 Special hazards arising from the substance or mixture
Hazardous combustion products: Nitrogen oxides, Carbon monoxide, carbon dioxide and so on.
Unusual fire and explosion hazards: This material will not burn until the water has evaporated. Residue can burn. If exposed to fire from another source and water is evaporated, exposure to high temperatures may cause toxic fumes.
5.3 Advice for firefighters
Fire-fighting procedures: Keep people away. Isolate fire and deny unnecessary entry. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage.
Special protective equipment for fire firefighters: Firefighters must wear positive-pressure, self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes fire-fighting helmet, coat, pants, boots, and gloves) when quenching the fires. If protective equipment is not available or not used, fight fire from a protected location or safe distance. The outlet should always be clean and unobstructed. If necessary, plugging or isolation measures shall be taken to prevent secondary disasters from spreading

Section 6: Accidental Release Measures
6.1 Personal precautions, protective equipment and emergency procedures:
Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to section 7, Handling, for additional precautionary measures. Use appropriate safety equipment.
For additional information, refer to Section 8, Exposure controls and Personal Protection.
6.2 Environmental precautions:
Prevent from entering into soil, ditches, sewers, waterways and /or groundwater. See Section 12, Ecological information. Spills or discharge to natural waterways is likely to kill aquatic organisms.
6.3 Methods and materials for containment and cleaning up:
Contain spilled material if possible. Small spills: absorb with materials such as Clay. Dirt. Sand. Sweep up. Collect in suitable and properly labelled containers.
Large spills: Contain for clean-up assistance. See Section 13, Disposal considerations, for additional information.
6.4 Reference to other sections:
References to other section, if applicable, have been provided in the previous sub-sections.

Section 7: Handling and Storage
7.1 Precautions for safe handling: Keep out of reach of children, irrelevant personnel and animals. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Wash thoroughly after handling. Use with adequate ventilation.
7.2 Conditions for safe storage, including any incompatibilities: Store in a dry place. Store in the original container. Keep container tightly closed when not in use. Do not store near food, foodstuffs, drugs or potable water supplies.
7.3 Specific end uses: Refer to product label.

Section 8: Exposure Controls/Personal Protection
8.1 Control parameters
Application and handlers should see the product label for proper personal protection equipment and clothing.
8.2 Exposure controls
Engineering controls: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations. Individual protection measures :
Respiratory protection: Wear the air respirator.
Eye/face protection: Wear a safety mask or protective chemical safety glasses.
Body protection: Wear appropriate protective clothing and latex gloves.
Other protection: No smoking, eating and drinking at the workplace. Wash hands before eating. Take shower when work has been finished. The staff should keep good health habits.

Section 9: Physical and Chemical Properties
9.1 Information on basic physical and chemical properties
Physical state: liquid.

Colour: Off-white
Odour: Mild pH:
6.5~8.5 Melting
point/range: Not
applicable
Freezing point: No test data available Boiling
point: No test data available.
Flammability: Not applicable to liquids.
Lower/upper explosion limit: No test data available
Flash point: closed cup > 100C
Vapour pressure: No test data available
Relative density: 1.03
Water Solubility: Dispersible in water.
Partition coefficient: No data available (n-octanol/water).
Decomposition temperature: No test data available.
Kinematic viscosity: No test data available
Explosive properties: No
Oxidizing properties: No
9.2 Other information
Liquid density: 1.03 g/cm3 .
NOTE: The physical data presented above are typical values and should not be constructed as a specification.

Section 10: Stability and Reactivity

10.1 Reactivity: No dangerous reaction known under conditions of normal use.
10.2 Chemical stability: Thermally stable at recommended temperatures and pressures.
10.3 Possibility of hazardous reactions: Polymerization will not occur.
10.4 Avoid contact conditions: Decomposes at elevated temperatures.
10.5 Incompatible materials: None know.
10.6 Hazardous decomposition products: carbon monoxide, carbon dioxide, nitrogen oxides, etc.

Section 11: Toxicological Information

11.1 Information on toxicological effects
Acute oral: LD50 for rats >5000 mg/kg.
Acute dermal: LD50 for rats >5000 mg/kg.
Acute inhalation: LC50 (4h) for rats >5.04 mg/L air.
Skin Irritation: Not a skin irritant (in rabbits).
Eye Irritation: Non-irritating to eye (in rabbits).
Sensitization: Non-sensitizer (in mouse-Local Lymph Node Assay (LLNA)).
Carcinogenicity: for active ingredient, it did not cause cancer in laboratory animals.
Teratogenicity: for active ingredient, it did not cause birth defects or other effects in the foetus even at doses which caused toxic effects in the mother.
Reproductive toxicity: for active ingredient, in laboratory animal studies, it effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.
Mutagenicity: for active ingredient, in vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.
Aspiration hazard: based on physical properties, not likely to be an aspiration hazard.

Section 12: Ecological Information

12.1 Toxicity
Birds: for active ingredient, Acute oral LD50 (7d) for Coturnix coturnix japonica >1000 a.i.mg/kg body weight.
Acute feeding LC50 (8d) for Coturnix coturnix japonica >2000 a.i.mg/kg feeding.
Fish: for active ingredient, LC50 (96 h) for Brachydonio rerio 2.75 a.i.mg/L.
Daphnia: for active ingredient, EC50 (48 h) for Daphnia magna straus 12.1 a.i.mg/L.
Algae: for active ingredient, EC50 (72 h) for Scenedesmus obliquus 4.43 a.i.mg/L.
Bees: for active ingredient, High risk to Trichogramma ostriniae; LC50 (48 h) for Apis mellifera L. 55.9 a.i.mg/L;
LD50 (48 h) for Apis mellifera L. 0.00828 a.i.μg/bee.

Worms: for active ingredient, LC50 (96 h) for Bombyx mori 0.334 a.i.mg/L; LC50 (14 d) for Eisenia foetida > 100 a.i.mg/kg.
Tadpole: for active ingredient, LC50 (48 h) for Xenopus laevis 6.45 a.i.mg/L.
Soil microorganisms: for active ingredient, Lowly toxic.
12.2 Persistence and degradability
For spinosad, surface photodegradation is expected with exposure to sunlight. Material is not readily biodegradable according to OECD/EEC guidelines.
12.3 Bioaccumulative potential.
For similar active ingredient(s). spinosyn A. bioconcentration potential is moderate.
12.4 Mobility in soil
For similar materials, spinosyn A. Expected to be relatively immobile in soil.

Section 13: Disposal Considerations
13.1 Waste treatment methods
It must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristics or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.
Attention: The related workers must wear protective clothing and pay attention to their own safety. The burial place of disposal should keep away from residence and source of water. And it should be incinerated at a specific stove.

Section 14: Transport Information Classification for ROAD and RAIL transport (ADR)
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,N.O.S.(spinosad) - UN number: UN 3082
Class: 9
Packing group: III
Marine pollutant: Spinosad

Exempted from ADR + LQ (UN3077 + 3082 Class 9) according to extra provision ADR SV375 as of 01.01.15. “375. These substances when carried in single or combination packaging containing net quantity per single or inner packaging of 5 L or less for liquids having a nett mass per single or inner packaging of 5KG or less for solids, are not subject to any other provisions.”

Classification for SEA transport (IMO-IMDG):
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,N.O.S.(spinosad) UN number: 3082
Class: 9
Packing group: III
Marine pollutant: Spinosad
Transport in bulk: Consult IMO regulations before transporting ocean bulk

According to Annex I or II of MARPOL 73/78 and the IBC or IGC Code
Classification for AIR transport (IATA/ICAO):
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,N.O.S.(spinosad) UN number: 3082
Class: 9
Packing group: III
Marine pollutant: spinosad
Hazchem Code: 3X

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material

Section 15: Regulatory Information

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

Reach Regulation (EC) No 1907/2006

This product contains only components that have been either pre-registered, registered, are exempt from registration, are regarded as registered or are not subject to registration according to Regulation (EC) No. 1907/2006 (REACH)., the aforementioned indications of the REACH registration status are provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. It is the buyer’s or user’s responsibility to ensure that his/her understanding of the regulatory status of this product is correct.

15.2 Chemical safety assessment

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

Section 16: Other Information

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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