SAFETY DATA SHEET
Sinclair Sincron + Top Dressing

Date: 12th February 2019
Version: 01
Revision number: n/a
Supersedes: n/a

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier: Sinclair Sincron + Top Dressing
Product code: F176386S

1.2 Relevant uses of the substance or mixture and uses advised against:
Supplied for professional use for top dressing to supply nutrients to potted plants in horticulture.

1.3 Details of the supplier of the safety data sheet:
Westland Horticulture Ltd
Bridges Road
Ellesmere Port
Chester
CH65 4LB

Sinclair is a subsidiary of Westland

Telephone Number: 0151 356 6014 (09:00 to 17:00)

E-mail Address: sales@sinclairpro.com

1.4 Emergency telephone number
Emergency telephone Number: 0151 356 6014 (09:00 to 17:00)

2. Hazards Identification

2.1 Classification of the substance or mixture
2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]
Not classified

2.2 Label Elements according to Regulation (EC) No 1272/2008 [CLP]
There are no statutory label elements.

2.3 Other hazards
This mixture does not contain any substances that are assessed to be PBT or vPvB.

3. Composition/information on ingredients

3.2 Mixtures
Hazardous components

Name:	CAS/ EC No.	Index No./REACh Registration No.	Pictogram(s) according to 1272/2008:	H-phrase(s) according to 1272/2008:	Conc. [% w/w]
Ammonium Nitrate	6485-52-2/ 229-347-8	- REACh no.: 01-2119490981-27	 GHS03  GHS07	Oxid. Solid 3; H272 Eye Irrit. 2; H319	10 - 45

N,N (isobutylidene)diurea	6104-30-9/ 228-055-8	- REACh no.: 01-2119457269-28	None	None	10 - 45

4.0. First Aid Measures

4.1 Description of first aid measures

General advice
Compliance with the rules of good industrial hygiene is recommended.

Inhalation
If large amounts of dust are inhaled, remove exposed person to fresh air, keep warm and at rest. If breathing problems occur administer oxygen or CPR. Seek immediate medical attention.

Ingestion
Wash out mouth with water.
Get medical attention if adverse health effects persist or are severe.

Skin contact
Wash skin immediately with soap and water. Get medical attention if irritation develops and persists.

Eye contact
Immediately flush eyes with plenty of water.
If eye irritation occurs or persists, consult a specialist.

4.2 Most important symptoms and effects, both acute and delayed
None reported.

4.3 Indications of any immediate medical attention and special treatment needed
Notes to physician
No specific treatment.

5. Fire-Fighting measures

5.1 Extinguishing media
Suitable Water.
Unsuitable extinguishing media: foam, dry chemical, carbon dioxide, sand

5.2 Special hazards arising from the substance or mixture
Can decompose at above 100˚C. Thermal decomposition products: nitrogen oxides, ammonia, isobutyaldehyde.

5.3 Advice for firefighters
Special precautions for fire-fighters
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Avoid contact with skin, eyes and clothing.
Prevent formation of dust if possible. Respiratory equipment should be worn if dust created.
Provide adequate ventilation.

6.2 Environmental precautions
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

6.3 Methods and material for containment and cleaning up
Avoid dry sweeping, dust creation and wind dispersal.
Collect powder using a special dust vacuum cleaner with particle filter.
Transfer to a suitable labelled container for disposal according to local regulations.
If a vacuum system is not available only wet clean up methods should be used.

6.4 Reference to other sections
Note: see SECTION 1 for emergency contact information, SECTION 8 for personal protection and section 13 for waste disposal.

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7. Handling and storage

7.1 Precaution for safe handling
Keep away from heat and sources of ignition. The material is not flammable but may explode if heated under confinement
Protect from contamination, Keep away from direct sunlight. Protect from heat. Protect from moisture.
Keep away from combustible materials. Do not smoke
Do not eat or drink when using this product. Wash hands after using this product

7.2 **Conditions for safe storage, including any incompatibilities**
Store in original bag away from other materials. Keep away from direct sunlight and protect from sources of heat and ignition. The material is incompatible with reducing agents.

7.3 **Specific end use(s)**
Supplied for professional use for top dressing to supply nutrients to potted plants in horticulture.

8.Exposure controls/personal protection

8.1 Control Parameters
None set for components.
Ammonium Nitrate:
DNELs
End Use: Workers
Exposure routes: Inhalation
Potential health effects: Specific effects
Exposure time: 1 d
Value: 37.6 mg/m^3

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Specific effects
Exposure time: 1 d
Value: 21.3 mg/kg body weight

End Use: Workers
Exposure routes: Ingestion
Potential health effects: Specific effects
Exposure time: 1 d
Value: 12.8 mg/kg body weight

End Use: Consumers
Exposure routes: Ingestion
Potential health effects: Specific effects
Exposure time: 1 d
Value: 12.8 mg/kg body weight

End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Specific effects
Exposure time: 1 d
Value: 11.1 mg/m^3

PNECs:
Fresh Water
Value 0.45 mg/l
Marine Water
Value 0.045 mg/l
Ceiling Limit Value
Value 4.4 mg/l

N,N"- (isobutylidene)diurea:
DNELs:
End use: Workers
Exposure routes: Skin Contact
Potential health Systemic effects
Exposure time: 1 day
Value: 37.5 mg / Kg body weight
Continuous Exposure

End use: Workers
Exposure routes: Inhalation
Potential health Systemic effects
Exposure time: 1 day
Value: 66.12 mg / m^3
Continuous Exposure

End use: Consumers
Exposure routes: Skin Contact
Potential health Systemic effects
Exposure time: 1 day
Value: 18.75 mg / Kg body weight
Continuous Exposure

End use: Consumers
Exposure routes: Inhalation
Potential health Systemic effects
Exposure time: 1 day
Value 16.31 mg / m^3
Continuous Exposure

End use: Consumers
Exposure routes: Ingestion
Potential health Systemic effects
Exposure time: 1 day

Value: 9.375 mg / Kg body weight
Continuous Exposure

PNECs:
Fresh Water
Value 0.5 mg/l
Marine Water
Value 0.05mg/l
Fresh Water Sediment
Value 1.76 mg/l
Marine Water Sediment
Value 0.176 mg/l
Soil
Value : 10.7 mg/l
Behaviour in waste water treatment plants
Value : 640 mg/l

8.2 Exposure controls
General
Avoid contact with skin, eyes and clothing.

Hygiene measures:
Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure that there is sufficient ventilation of the area.

Eye and face protection
Wear tightly fitting safety goggles and Face shield that meet EN 166 a/o ANSI Z87.1 standards

Skin protection
When handling wear gloves.
Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact.

Inhalation
In cases of prolonged exposure to airborne dust concentrations, wear respiratory protective equipment that complies with European or national legislation i.e. Type FFP2.

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9. Physical and chemical properties
9.1 Information on basic physical and chemical properties
Appearance: Pale brown granule
Physical state at 20^{o}C: Solid
Odour: Odourless
Odour threshold: No data
pH: 6.2 (100g/l in deionised water)
Melting Point: No data
Boiling point: No data
Freezing point: Not applicable
Flash point: Not applicable
Evaporation rate: Not applicable
Flammability: Not flammable
Explosion limits Non-explosive
Upper: No data

Lower: No data
Vapour pressure: Not applicable
Vapour density: No data
Bulk density: 860 g/l
Solubility: soluble
Partition coefficient: n-octanol/water No data
Auto-ignition temperature: Does not auto-ignite

Thermal decomposition temperature: >130^{o}C to avoid thermal decomposition, do not overheat.
Viscosity: Not applicable
Explosive properties: No data
Oxidising properties: No data

9.2 Other Information
No other relevant information available

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10. Stability and reactivity

10.1 Reactivity
Not likely to react adversely if stored and handled as recommended.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Evolution of ammonia under the influence of alkalis.

10.4 Conditions to avoid
Heat and sources of ignition.

10.5 Incompatible materials
Oxidizable substances, substances with an aid reaction, alkaline reactive substances.

10.6 Hazardous decomposition products
Nitrogen oxides, ammonia, isobutyraldehyde.

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11. Toxicological Information

11.1 Information on toxicological effects
The mixture has not been assessed for toxicological effects, the mixture classification is given in section 2 based on individual component contents. Individual component hazards are given in section 3
Product:

Acute toxicity:	Not expected to be toxic. LD50 >2000 mg/Kg (rat)
Skin corrosion/irritation:	Product is not classified as causing skin irritation. rabbit, Result: non-irritant, OECD Guideline 404
Serious eye damage/irritation:	Product is not classified as causing severe eye irritation or eye damage. rabbit, Result : non-irritant, OECD Guideline 405
Respiratory or skin sensitisation:	Product is not classified as causing skin sensitisation.
Germ cell mutagenicity:	No information specified.
Carcinogenicity:	Contains no ingredient listed as a carcinogen.
Reproductive toxicity:	Not toxic to reproduction.
STOT-single exposure:	Product is not classified as having Specific Target Organ Toxicity for single exposure

STOT-repeated exposure:	Product is not classified as having Specific Target Organ Toxicity for repeat exposure
Aspiration hazard:	No information specified.

Components

Ammonium Nitrate

Acute oral toxicity:	LD50: >29500 mg/Kg (rat) OECD Test Guideline 401
Acute inhalation toxicity:	LC50: >88.8 mg/l. no information available
Acute dermal toxicity:	LD50 > 5000 mg/Kg,rat, OECD Test Guidelines 402
Skin corrosion/irritation:	rabbit, Result: non-irritant, OECD Guideline 404
Serious eye damage/eye irritation :	rabbit, Result : Irritant, OECD Guideline 405
Respiratory or skin sensitization:	Result: Does not cause skin sensitization
Germ cell mutagenicity	No information.
Genotoxicity in vitro:	Result: negative, OECD Test Guideline 471
Carcinogenicity:	rat,animal testing did not show any carcinogenic effects
Reproductive toxicity:	rat, animal testing did not show any effect on fertility
Teratogenicity:	rat, did not show teratogenic effects in animal experiments
STOT – repeated exposure:	rat oral exposure time 28 days NOAEL: >1500 mg / Kg
STOT – repeated exposure:	rat oral exposure time 52 weeks NOAEL 256 mg / Kg
STOT – repeated exposure:	rat by inhalation. Exposure time 2w, NOAEL >= 185 mg / Kg

N,N"- (isobutylidene)-diurea

Acute oral toxicity:	LD50: >10000 mg/Kg (rat) calculated
Acute dermal toxicity:	LD50 > 2000 mg/Kg,(rat), OECD Test Guidelines 402
Respiratory or skin sensitization:	mouse. Result : Did not cause sensitization on laboratory animals OECD Guideline 429
Germ cell mutagenicity	
Genotoxicity in vitro:	In vitro test did not show mutagenic effects
Carcinogenicity:	animal testing did not show any carcinogenic effects
Reproductive toxicity:	animal testing did not show any effect on fertility
Teratogenicity:	did not show teratogenic effects in animal experiments
STOT – single exposure:	Assessment. The substance is not classified as a specific organ toxicant, single exposure
STOT – repeated exosure:	Assessment. The substance is not classified as a specific organ toxicant, repeated exposure

12. Ecological Information

12.1 Toxicity

Mixture not classified as harmful to aquatic life.

Product

Toxicity to fish:	LC50: >100 mg/l, 96h, Oncorhynchus myskiss (Rainbow Trout) OECD Guideline 203
Toxicity to daphnia:	EC50. >100 mg/l, 48h, Daphnia magna (Water Flea) Directive 84/449/EEC, C.2
Toxicity to algae:	EC50. >100 mg/l, 72h, Scenedesmus subspicatus, DIN 38412
Toxicity to bacteria:	EC0: ca 640 mg/l,16h, Pseudomonas putida, activated sludge, no data available.

Components

Ammonium Nitrate

Toxicity to fish:	LC50 >100 mg/l, 96h
Toxicity to daphnia:	EC50 490 mg/l 48h, Daphnia magna (Water Flea)
Toxicity to algae:	EC50 1700 mg/l, Selnedesmus capricornutum

N,N"- (isobutylidene)-diurea
Toxicity to fish :LC50: >1000 mg/l, 96h, Oncorhynchus myskiss (Rainbow Trout) OECD Guideline 203
Toxicity to daphnia: EC50. ca 500 mg/l, 48h, Daphnia magna (Water Flea) Directive 84/449/EEC, C.2
Toxicity to algae: EC50. >500 mg/l, 72h, Scenedesmus subspicatus, DIN 38412
Toxicity to bacteria: EC0: ca 640 mg/l,16h, Pseudomonas putida

12.2 Persistence and degradability
Product
No data available.

Components
Ammonium Nitrate

Biodegadability: The methods for determining the biological degradability are not applicable to inorganic substances.

N,N"- (isobutylidene)-diurea
Biodegradability: The product is readily miscible in water and readily biodegradable in both water and soil. Accumulation not expected

12.3 Bioaccumulative potential
Product Bioaccumulation is unlikely

Components
Ammonium Nitrate Bioaccumulation is unlikely
N,N"- (isobutylidene)-diurea Bioaccumulation is unlikely

12.4 Mobility in soil
No specific information available.

12.5 Results of PBT and vPvB assessment
This mixture does not contain any substances that are assessed to be PBT or vPvB.

12.6 Other adverse effects
No adverse effects expected if regulations and advice for storage and handling are observed.

13.Disposal considerations
13.1 Waste Treatment Methods
Methods of disposal:
The residues of the product as such are to be considered non-hazardous special waste.
Disposal must be entrusted to a company authorized to manage waste, in compliance with national and possibly local regulations. Never dispose of the product in the ground, in sewers or waterways.
CONTAMINATED PACKAGING
Contaminated packaging must be sent for recovery or disposal in accordance with national waste management regulations

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14. Transport Information
14.1 UN number: Not applicable
14.2 UN proper shipping name: Not applicable
14.3 Transport hazard: Not applicable
14.4 Packing group: Not applicable

14.5 Environmental hazards: Product is not classified as harmful to the environment.
14.6 Special precautions for user: No information available
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
Applicable for Maritime bulk transport only. Check with carrier.

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.
This substance is classified and labelled in accordance with regulation 1272/2008 and Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2 Chemical Safety Assessment
CSA not undertaken for this substance

16. Other Information

Abbreviations:

DNEL	Derived No-Effect Level
Eye Irrit. 2	Eye Irritation category 3
LC/LD50	Lethal Concentration/Dose 50%
OECD	Organisation for Economic Co-operation and Development
Oxid. Solid 3	Oxidising Solid category 3
PNEC	Predicted No Effect Concentration
PBT	Persistent, Bioaccumulative, Toxic
STOT	Specific Target Organ Toxicity
vPvB	very Persistent, very Bioaccumulative

Full text of Hazard Statements not displayed in full in sections 2 and 3:

H272	May intensify fire; oxidiser.
H319	Causes serious eye irritation.

SDS information:
This safety data sheet is compiled using data submitted for raw materials and practical experience. This product is intended for professional users only.

This Safety Data Sheet is prepared in compliance with regulation 1272/2008 and Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the

Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

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