SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) Annex II

Apollo 50 SC

Revision Date 24-Dec-2020 **Version** 3 **Product No** INS00034-44

Publish Date 24-Dec-2020

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Apollo 50 SC

Synonyms Clofentezine 500 SC

Pure substance/mixture Mixture

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

Recommended Use Acaricide; Professional use***

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Supplier Address

ADAMA Agricultural Solutions UK Ltd
Third Floor East
1410 Arlington Business Park
Theale
READING
RG7 4SA
Tel: 01635 860555
Fax: 01635 861555

For further information, please contact

Email address ukenquiries@adama.com

1.4. Emergency telephone number

Emergency Telephone

National Chemical Emergency Centre (UK):
Tel: 01865 407333 (24 hours)
National Poisons Information Centre (Republic of Ireland)
Tel: 01 809 2166 (8am – 10pm 7 days a week)***

Section 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Hazardous to the Aquatic Environment - Chronic Hazard Category 2 - (H411)

2.2. Label elements

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

Hazard pictograms



Signal word	none
Hazard Statements	H411 - Toxic to aquatic life with long lasting effects
Precautionary Statements	P102 - Keep out of reach of children P501 - Dispose of contents/ container to an approved waste disposal plant
EU Specific Hazard Statements	EUH401 - To avoid risks to human health and the environment, comply with the instructions for use EUH208 - Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction.
Additional phrases for PPP	SP1 - Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

2.3. Other hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture***

Chemical Name	Weight-%	CAS No	EC No	Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	M-Factor	REACH Registration Number
Clofentezine***	41-45	74115-24-5	277-728-2	-	Aquatic Chronic 1 (H410)***	M=1***	-
Propane-1,2-diol ***	5-10	57-55-6	200-338-0	-	-		01-2119456809-23***
Lignosulfonic acid, sodium salt***	1-2	8061-51-6	617-124-1 ***	-	Eye Irrit. 2 (H319)***		-
1,2-Benzisothiazolin-3-one***	<0.05	2634-33-5	220-120-9	613-088-00-6	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Acute Tox. 4 (H302) Aquatic Acute 1 (H400) ***		01-2120761540-60-XXXX***

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

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection!.
Inhalation	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call

	a physician.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Ingestion	Rinse mouth. Drink plenty of water. If symptoms persist, call a physician.
Self-protection of the first aider	Use personal protective equipment as required.

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

Symptoms None known.

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

Note to physicians Treat symptomatically.

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
No information available.

5.2. Special hazards arising from the substance or mixture

No specific hazard known.

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus
In the event of fire and/or explosion do not breathe fumes.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions
Use only with adequate ventilation.

For emergency responders
Use personal protection recommended in Section 8.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

Other Information
See also section 8,13

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling
Use only with adequate ventilation.

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Risk Management Methods (RMM)
The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Propane-1,2-diol *** 57-55-6		STEL: 450 ppm STEL: 1422 mg/m³ STEL: 30 mg/m³ TWA: 150 ppm TWA: 474 mg/m³ TWA: 10 mg/m³			
Chemical Name	**Austria**	**Switzerland**	**Poland**	**Norway**	**Ireland**
Propane-1,2-diol *** 57-55-6				TWA: 25 ppm TWA: 79 mg/m³ STEL: 37.5 ppm STEL: 118.5 mg/m³	TWA: 150 ppm TWA: 470 mg/m³ TWA: 10 mg/m³

8.2. Exposure controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand Protection Suitable chemical resistant gloves (EN 374) also with prolonged, direct contact (recommendation: protection index 6, corresponding > 480 minutes Permeability time (permeation) according to EN 374): e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm).

Body Protection Use suitable protective clothing and equipment if required, such as safety goggles certified to EN 166, gloves certified to EN 374, protective boots certified to EN 13832, and/or a water repellent woven coverall with 65% polyester and 35 % cotton.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Property		Values	Method	Remarks
Appearance				
Physical state	:	suspension		
Color	:	dark red		
Odor	:	Slight		
Odor threshold	:	No data available		
pH	:	6.7 - 7.7	CIPAC MT 75	solution (1%)
Melting point/freezing point °C	:	----		Not Applicable
Boiling point/boiling range °C	:	No data available		
Flash point °C	:	> 120.5	EEC A.9	
Evaporation rate	:	----		No data available
Flammability (solid, gas)	:	Not applicable for liquids		
Upper/lower flammability or explosive limits	:	No data available		
Vapor pressure kPa	:	----		Not Applicable
Vapor density	:	No data available		
Relative density	:	1.15 - 1.25	OECD 109	
Solubility(ies) mg/l	:	----		Not Applicable
Partition Coefficient (n-octanol/water) Log Pow	:			See Section 12 for more information
Autoignition temperature °C	:	334	EEC A.15	
Decomposition temperature °C	:	No data available		
Kinematic viscosity mm2/s 40 °C	:	83 - 555	OECD 114	
Explosive properties	:	Not an explosive	EEC A.14	
Oxidizing properties	:	Not oxidizing	EEC A.21	

9.2. Other information

Bulk density g/ml	:	----		Not Applicable
Surface tension mN/m	:	54	EEC A.5	

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

Heat, flames and sparks.

10.5. Incompatible materials

No information available

10.6. Hazardous decomposition products

None under normal use conditions.

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

Acute toxicity

		Values	Species	Method	Remarks
Oral LD50 mg/kg	:	> 5000	Rat	OECD 423	
Dermal LD50 mg/kg	:	> 5000	Rat	OECD 402	
Inhalation LC50 mg/l/4h	:	----			Not Applicable
Skin corrosion/irritation	:	Non-irritating to the skin	Rabbit	OECD 404	
Serious eye damage/eye irritation	:	Not irritating to eyes	Rabbit	OECD 405	
Respiratory/skin sensitization	:	Not a skin sensitizer	Guinea pig	OECD 406; (M&K test)	

Chronic toxicity

Germ cell mutagenicity
Chemical Name
Clofentezine*** : Not classified

Carcinogenicity .
Chemical Name
Clofentezine*** : Not Carcinogenic

Reproductive toxicity .
Chemical Name
Clofentezine*** : Not classified

STOT - single exposure
Chemical Name
Clofentezine*** : Not classified***

STOT - repeated exposure
Chemical Name
Clofentezine*** : Not classified***

Aspiration hazard
Chemical Name
Clofentezine*** : Not classified***

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Aquatic toxicity

Acute toxicity		Values	Species	Method	Remarks
Fish 96-hour LC50 mg/l	:	> 20	Oncorhynchus mykiss	US EPA, FIFRA E,72-1	
Crustacea 48-hour EC50 mg/l	:	> 200	Daphnia magna	OECD 202	
Algae 72-hour EC50 mg/l	:	> 80	Selenastrum capricornutum	OECD 201	
Other plants EC50 mg/l	:	----			Not Applicable

Chronic aquatic toxicity		Values	Species	Method	Remarks
Fish NOEC mg/l	:	2.3***	Fathead Minnow***	OECD 210***	28d***
Crustacea NOEC mg/l	:	0.5***	Daphnia magna***	OECD 202***	
Algae NOEC mg/l	:	> 80***	Selenastrum capricornutum***	OECD 201***	

Other plants NOEC mg/l : No data available

Terrestrial Toxicity
Birds Oral LD50 mg/kg

Chemical Name				
Clofentezine***	: > 3000	Mallard duck	US EPA 71-1	

Bees Oral LD50 µg/bee

Chemical Name			
Clofentezine***	: > 252.6	EPPO 170	

12.2. Persistence and degradability

Abiotic Degradation Water DT50 days Chemical Name	Values	Method	Remarks
Clofentezine***	: 9.6		

Soil DT50 days

Chemical Name			
Clofentezine***	: 63.8		

Biodegradation

Chemical Name			
Clofentezine***	: Not readily biodegradable		

12.3. Bioaccumulative potential

Partition Coefficient (n-octanol/water) Log Pow

Chemical Name			
Clofentezine***	: 3.1	OECD 107	20 ◦ C

Bioconcentration factor (BCF)

Chemical Name			
Clofentezine***	: 248		

12.4. Mobility in soil

Adsorption/Desorption Chemical Name	Values	Method	Remarks
Clofentezine***	: 1064		KOC; Low mobility in soil

12.5. Results of PBT and vPvB assessment
The components in this formulation do not meet the criteria for classification as PBT or vPvB

12.6. Other adverse effects

No information available.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Improper disposal or reuse of this container may be dangerous and illegal.

Other Information Waste codes should be assigned by the user based on the application for which the product

was used.

Section 14: TRANSPORTATION INFORMATION

IMDG/IMO

14.1 UN/ID No *	UN3082***
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.*** (Clofentezine)***
14.3 Hazard Class	9***
14.4 Packing Group	III***
14.5 Marine pollutant	Yes***
14.6 Special precautions for user	

RID/ADR

14.1 UN/ID No *	UN3082***
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.*** (Clofentezine)***
14.3 Hazard Class	9***
14.4 Packing Group	III***
14.5 Environmental hazard	Yes***
14.6 Special precautions for user	
14.7 Tunnel restriction code	**-**

ICAO/IATA

14.1 UN/ID No *	UN3082***
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.*** (Clofentezine)***
14.3 Hazard Class	9***
14.4 Packing Group	III***
14.5 Environmental hazard	Yes***
14.6 Special precautions for user	
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not Applicable



* Note: UN3077 & UN3082 – These products may be transported as non-dangerous goods under the special provisions of IMDG Code 2.10.2.7; ADR SP375 and ICAO/IATA A197 when packed in single or inner packaging of up to 5L for liquids or 5 kg or less for solids.

Section 15: REGULATORY INFORMATION

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

Trade name	Registration number	Registration date
Not Applicable	Not Applicable	Not Applicable

15.2. Chemical safety assessment

A chemical safety assessment according to regulation (EC) No. 1907/2006 is not required. A risk assessment was performed according to directive (EC) No. 91/414 or according to regulation (EC) No. 1107/2009.

Section 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3
H302 - Harmful if swallowed
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H400 - Very toxic to aquatic life
H411 - Toxic to aquatic life with long lasting effects
H412 - Harmful to aquatic life with long lasting effects***

List of Acronyms
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CAS Number - Chemical Abstracts Service number
EC Number - EINECS and ELINCS Number
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
OECD - Organization for Economic Co-operation and Development
PBT - Persistent, Bioaccumulative and Toxic substance
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
STOT - Specific Target Organ Toxicity
vPvB - Very Persistent and Very Bioaccumulative

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Revision Note Changes made to the last version are labeled with this sign ***.

Process of classification evaluation in accordance with CLP regulation.

Classification of the mixture
H411 - Toxic to aquatic life with long lasting effects***

Classification procedure
Classification based on test data***

Disclaimer
The information provided in this Material 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.

End of Safety Data Sheet