(in accordance with Regulation (EU) 2020/878)

G0059-codamin 150



Print date: 22/08/2023

Version 1 Date of compilation: 2/08/2017

Version 5 (replaces version 4) Revision date: 22/08/2023

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

1.1 Product identifier.

Product Name: codamin 150
Product Code: G0059

UFI: RFN0-C0JD-S00Y-87AJ

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

SU1. Agriculture (biostimulant). Reserved for professional use.

Uses advised against:

Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company: Sustainable Agro Solutions, S.A.U.

Address: Ctra. N-240, Km. 110

City: Almacelles
Province: Lleida
Telephone: 973 74 04 00
Fax: 973 74 14 89
E-mail: info@sas-agri.com
Web: www.sas-agri.com

1.4 Emergency telephone number: 973 74 04 00 (Only available during office hours; Monday-Friday; 08:00-18:00)

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the substance or mixture.

In accordance with Regulation (EC) No 1272/2008:

Aquatic Chronic 3: Harmful to aquatic life with long lasting effects.

Eye Irrit. 2 : Causes serious eye irritation.

2.2 Label elements.

Labelling in accordance with Regulation (EC) No 1272/2008:

Pictograms:



Signal Word:

Warning

Hazard statements:

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P264 Wash hands thoroughly after handling. P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

(in accordance with Regulation (EU) 2020/878)

G0059-codamin 150



Print date: 22/08/2023

Version 1 Date of compilation: 2/08/2017
Version 5 (replaces version 4) Revision date: 22/08/2023

P501 Dispose of contents/container to a collection point for hazardous or special waste, in accordance with local, regional, national and/or international regulations.

2.3 Other hazards.

The mixture does not contain substances classified as PBT.

The mixture does not contain substances classified as vPvB.

The mixture does not contain any endocrine disrupting properties substances.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Not applicable.

3.2 Mixtures.

Substances posing a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, assigned a Community exposure limit in the workplace, and classified as PBT/vPvB or included in the Candidate List:

			(*)Classification - Regulation (EC) No 1272/2008	
Identifiers	Name	Concentrate	Classification	Specifics concentration limits and Acute toxicity estimate
Index No: 026-003- 01-4 CAS No: 7782-63-0 EC No: 231-753-5	iron (II) sulfate (1:1) heptahydrate, sulfuric acid, iron(II) salt (1:1), heptahydrate, ferrous sulfate heptahydrate	10 - 25 %	Acute Tox. 4 *, H302 - Eye Irrit. 2, H319 - Skin Irrit. 2, H315	Skin Irrit. 2, H315: C ≥ 25 %
CAS No: 10034-96-5 Registration No: 01- 2119456624-35-XXXX	[1] manganese(2+) hydrate sulfate	1 - 2.5 %	Aquatic Chronic 2, H411 - STOT RE 2, H373	-
Index No: 017-014- 00-8 CAS No: 12125-02-9 EC No: 235-186-4 Registration No: 01- 2119489385-24-XXXX	ammonium chloride	1 - 10 %	Acute Tox. 4 *, H302 - Eye Irrit. 2, H319	-
Index No: 030-006- 00-9 CAS No: 7446-19-7 EC No: 231-793-3	zinc sulphate (hydrous) (mono-, hexa-and hepta hydrate)	1 - 2.5 %	Acute Tox. 4 *, H302 - Aquatic Acute 1, H400 - Aquatic Chronic 1, H410 - Eye Dam. 1, H318	ı
Index No: 605-001- 00-5 CAS No: 50-00-0 EC No: 200-001-8 Registration No: 01- 2119488953-20-XXXX	[1] formaldehyde	0 - 0.1 %	Acute Tox. 3, H311 - Acute Tox. 3, H331 - Acute Tox. 3, H301 - Carc. 1B, H350 - Muta. 2, H341 - Skin Corr. 1B, H314 - Skin Sens. 1, H317	Skin Corr. 1B, H314: C ≥25 % Skin Irrit. 2, H315: 5 % ≤ C < 25 % Eye Irrit. 2, H319: 5 % ≤ C < 25 % STOT SE 3, H335: C ≥ 5 % Skin Sens. 1, H317: C ≥ 0,2

^(*) The complete text of the H phrases is given in section 16 of this Safety Data Sheet.

^{*} See Regulation (EC) No. 1272/2008, Annex VI, section 1.2.

^[1] Substance with a European Union exposure limit in the workplace (see section 8.1).

(in accordance with Regulation (EU) 2020/878)

G0059-codamin 150



Print date: 22/08/2023

Version 1 Date of compilation: 2/08/2017

Version 5 (replaces version 4) Revision date: 22/08/2023

[2] Substance with a national workplace exposure limit (see section 8.1).

SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

Eye contact.

Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance. Dont let the person to rub the affected eye.

<u>Skin contact</u>

Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners

Ingestion.

If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

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

Irritant Product, repeated or prolonged contact with skin or mucous membranes can cause redness, blisters or dermatitis, inhalation of spray mist or particles in suspension may cause irritation of the respiratory tract, some symptoms may not be immediate.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious. Cover the affected area with a dry sterile bandage. Protect the affected area from pressure or friction.

SECTION 5: FIREFIGHTING MEASURES.

The product is NOT classified as flammable, in case of fire the following measures should be taken:

5.1 Extinguishing media.

Suitable extinguishing media:

Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media:

Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

${f 5.2}$ Special hazards arising from the substance or mixture.

Special risks

Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways. Product residues and extinguishing media may contaminate the aquatic environment.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

(in accordance with Regulation (EU) 2020/878)

G0059-codamin 150



Print date: 22/08/2023

Version 1 Date of compilation: 2/08/2017

Version 5 (replaces version 4) Revision date: 22/08/2023

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Product dangerous for the environment, in case of large spills or if the product contaminates lakes, rivers, or sewers, inform the responsible authorities according to local legislation. Prevent the contamination of drains, surface or subterranean waters, and the ground.

6.3 Methods and material for containment and cleaning up.

Contain and collect spillage with inert absorbent material (earth, sand, vermiculite, Kieselguhr...) and clean the area immediately with a suitable decontaminant.

Deposit waste in closed and suitable containers for disposal, in compliance with local and national regulations (see section 13).

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

For personal protection, see section 8.

In the application area, smoking, eating, and drinking must be prohibited.

Follow legislation on occupational health and safety.

Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Store according to local legislation. Observe indications on the label. Store the containers between 5 and 25 ° C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

The product is not affected by Directive 2012/18/EU (SEVESO III).

7.3 Specific end use(s).

Agricultural

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

Work exposure limit for:

Name	CAS No.	Country	Limit value	ppm	mg/m³
manganese(2+) hydrate sulfate	10034-96-5	European Union [1]	Eight hours		0,2 (as manganese, inhalable fraction) 0,05 (as manganese, respirable fraction)
			Short term		
formendab. (do	F0 00 0	European	Eight hours	0,3	0,37
formaldehyde	50-00-0	Union [1]	Short term	0,6	0,74

[1] According both Binding Occupational Esposure Limits (BOELVs) and Indicative Occupational Exposure Limits (IOELVs) adopted by Scientific Committee for Occupational Exposure Limits to Chemical Agents (SCOEL).

The product does NOT contain substances with Biological Limit Values.

Concentration levels DNEL/DMEL:

(in accordance with Regulation (EU) 2020/878)

G0059-codamin 150

Version 1 Date of compilation: 2/08/2017

Version 5 (replaces version 4) Revision date: 22/08/2023



Print date: 22/08/2023

Name	DNEL/DMEL	Туре	Value
ammonium chloride	DNEL	Inhalation, Chronic, Systemic effects	33,5
CAS No: 12125-02-9	(Workers)		(mg/m³)
EC No: 235-186-4	, ,		
formed debude	DNEL	Inhalation, Chronic, Local effects	0,5
formaldehyde	(Workers)		(mg/m³)
CAS No: 50-00-0 EC No: 200-001-8	DNEL	Inhalation, Chronic, Systemic effects	9 (mg/m ³)
EC NO: 200-001-8	(Workers)		, ,

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.

DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable

minimum.

8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %
Uses:	SU1. Agriculture (biostimulant). Reserved for professional use.
Breathing protect	ion:
If the recommended	technical measures are observed, no individual protection equipment is necessary.
Hand protection:	
If the product is han	idled correctly, no individual protection equipment is necessary.
Eye protection:	
If the product is han	idled correctly, no individual protection equipment is necessary.
Skin protection:	
PPE:	Work footwear.
Characteristics:	«CE» marking, category II.
CEN standards:	EN ISO 13287, EN 20347
Maintenance:	This product adapts to the first user's foot shape. That is why, as well as for hygienic reasons, it should
rialite laile.	not be used by other people.
Observations:	Work footwear for professional use includes protection elements aimed at protecting users against any
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	injury resulting from an accident

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Physical state: Liquid Colour: dark brown Odour: Characteristic Odour threshold: Not available Melting point: Not applicable Freezing point: < 0 °C

Boiling point or initial boiling point and boiling range: Not available

Flammability: Not applicable Lower explosion limit: Not applicable Upper explosion limit: Not applicable Flash point: Not applicable

Auto-ignition temperature: Not applicable Decomposition temperature: Not available

pH: 4,8 (100%)

Kinematic viscosity: Not available Solubility: Soluble in water Hydrosolubility: completely soluble

Liposolubility: insoluble

Partition coefficient n-octanol/water (log value): Not applicable

Vapour pressure: Not available Absolute density: Not available

(in accordance with Regulation (EU) 2020/878)

G0059-codamin 150



Page 6 of 10 Print date: 22/08/2023

Version 1 Date of compilation: 2/08/2017

Version 5 (replaces version 4) Revision date: 22/08/2023

Relative density: 1,21 g/ml (Oscillating densitimer)

Relative vapour density: Not available Particle characteristics: Not applicable

9.2 Other information

Not applicable/Not available due to the nature/properties of the product

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

The product does not present hazards by their reactivity.

10.2 Chemical stability.

Stable under the recommended handling and storage conditions (see section 7).

10.3 Possibility of hazardous reactions.

The product does not present possibility of hazardous reactions.

10.4 Conditions to avoid.

Avoid any improper handling.

10.5 Incompatible materials.

Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

10.6 Hazardous decomposition products.

No decomposition if used for the intended uses.

SECTION 11: TOXICOLOGICAL INFORMATION.

1-component preparations: during curing, formaldehyde is released. This can cause irreversible effects, it is a mucous membrane irritant, and it can cause skin sensitivity.

IRRITANT MIXTURE. Splashes in the eyes can cause irritation.

11.1 Information on hazard classes as defined in Regulation (EC) N^{o} 1272/2008.

Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

Toxicological information about the substances present in the composition.

Name	Acute toxicity				
Name	Type	Test	Kind	Value	
	Oral	LD50	Rat	2150 mg/kg [1]	
manganese(2+) hydrate sulfate		[1] Indian Journal of Pharmacology. Vol. 23, Pg. 153, 1991.			
manganese(2+) nyarate sanate	Dermal				
CAS No: 10034-96-5 EC No:	Inhalation				

a) acute toxicity;

Not conclusive data for classification.

Acute Toxicity Estimate (ATE):

Mixtures:

ATE (Oral) = 3.448 mg/kg

b) skin corrosion/irritation;

Based on available data, the classification criteria are not met.

c) serious eye damage/irritation;

Product classified:

Eye irritation, Category 2: Causes serious eye irritation.

(in accordance with Regulation (EU) 2020/878)

G0059-codamin 150

Version 1 Date of compilation: 2/08/2017
Version 5 (replaces version 4) Revision date: 22/08/2023



Print date: 22/08/2023

d) respiratory or skin sensitisation;

Based on available data, the classification criteria are not met.

e) germ cell mutagenicity;

Based on available data, the classification criteria are not met.

f) carcinogenicity;

Based on available data, the classification criteria are not met.

g) reproductive toxicity;

Not conclusive data for classification.

h) STOT-single exposure;

Not conclusive data for classification.

i) STOT-repeated exposure;

Based on available data, the classification criteria are not met.

j) aspiration hazard;

Not conclusive data for classification.

11.2 Information on other hazards.

Endocrine disrupting properties

This product does not contain components with endocrine-disrupting properties with effects on human health.

Other information

There is no information available on other adverse health effects.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

Name		Ecotoxicity			
Name	Туре	Test	Kind	Value	
	Fish	Manganese	e in Single and Mixed	130 mg/l (96 h) [1] city of Copper, Zinc, and Salt Solutions to Juvenile ster. J.Fish Biol. 13(6):695-	
manganese(2+) hydrate sulfate	Aquatic invertebrates	LC50 Crustaceans 17,6 mg/l (48 h) [1] [1] Kimball, G. 1978. The Effects of Lesser Known Metals and One Organic to Fathead Minnows (Pimephales promelas) and Daphnia magna. Manuscr., Dep.of Entomol Fish.and Wildl., Univ.of Minnesota, Minneapolis, MN :88 p.			
CAS No: 10034-96-5 EC No:	Aquatic plants				

12.2 Persistence and degradability.

No information is available regarding the biodegradability of the substances present.

No information is available on the degradability of the substances present.

No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.

Information about the bioaccumulation of the substances present.

Name	Bioaccumulation
------	-----------------

(in accordance with Regulation (EU) 2020/878)

G0059-codamin 150



Print date: 22/08/2023

Version 1 Date of compilation: 2/08/2017

Version 5 (replaces version 4) Revision date: 22/08/2023

		Log Pow	BCF	NOECs	Level
formaldehyde					
CAS No: 50-00-0	EC No: 200-001-8	0,35	-	-	Very low

12.4 Mobility in soil.

No information is available about the mobility in soil.

The product must not be allowed to go into sewers or waterways.

Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

12.6 Endocrine disrupting properties.

This product doesn't contain components with environmental endocrine disrupting properties.

12.7 Other adverse effects.

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

No information is available about other adverse effects for the environment.

SECTION 13: DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

SECTION 14: TRANSPORT INFORMATION.

Transportation is not dangerous. In case of road accident causing the product's spillage, proceed in accordance with point 6.

14.1 UN number or ID number.

Transportation is not dangerous.

14.2 UN proper shipping name.

Description:

ADR/RID: Not classified as hazardous for transport. IMDG: Not classified as hazardous for transport.

ICAO/IATA: Not classified as hazardous for transport.

14.3 Transport hazard class(es).

Transportation is not dangerous.

14.4 Packing group.

Transportation is not dangerous.

14.5 Environmental hazards.

Transportation is not dangerous.

Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): Not applicable.

14.6 Special precautions for user.

Transportation is not dangerous.

14.7 Maritime transport in bulk according to IMO instruments.

Not classified as hazardous for transport.

(in accordance with Regulation (EU) 2020/878)

G0059-codamin 150



Print date: 22/08/2023

Version 1 Date of compilation: 2/08/2017

Version 5 (replaces version 4) Revision date: 22/08/2023

SECTION 15: REGULATORY INFORMATION.

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

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

Complete text of the H phrases that appear in section 3:

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
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.

Classification codes:

Acute Tox. 3: Acute toxicity (Dermal), Category 3
Acute Tox. 3: Acute toxicity (Inhalation), Category 3
Acute Tox. 3: Acute toxicity (Oral), Category 3
Acute Tox. 4: Acute toxicity (Oral), Category 4

Aquatic Acute 1: Acute toxicity to the aquatic environment, Category 1
Aquatic Chronic 1: Chronic effect to the aquatic environment, Category 1
Aquatic Chronic 2: Chronic effect to the aquatic environment, Category 2
Aquatic Chronic 3: Chronic effect to the aquatic environment, Category 3

Carc. 1B: Carcinogen, Category 1B

Eye Dam. 1: Serious eye damage, Category 1

Eye Irrit. 2 : Eye irritation, Category 2

Muta. 2: Mutagen, Category 2

Skin Corr. 1B: Skin Corrosive, Category 1B Skin Irrit. 2: Skin irritant, Category 2 Skin Sens. 1: Skin sensitiser, Category 1

STOT RE 2 : Specific target organ toxicity following a repeated exposure, Category 2

Changes regarding to the previous version:

(in accordance with Regulation (EU) 2020/878)

G0059-codamin 150

coda

Version 1 Date of compilation: 2/08/2017 Page 10 of 10 Version 5 (replaces version 4) Revision date: 22/08/2023 Print date: 22/08/2023

- Changes in the composition of the product (SECTION 3.2).
- Addition of exposure data (SECTION 8.1).
- Modification in the values of the physical and chemical properties (SECTION 9).
- Modification of the information of the stability and reactivity conditions (SECTION 10.2).
- Modification of the information of the stability and reactivity conditions (SECTION 10.3).
- Modification of the information of the stability and reactivity conditions (SECTION 10.4).
- Modification of the information of the stability and reactivity conditions (SECTION 10.5).
- Modification of the information of the stability and reactivity conditions (SECTION 10.6).
- Change in the hazard classification (SECTION 11.1).
- Addition of ecological information values (SECTION 12.3).
- Addition of abbreviations and acronyms (SECTION 16).

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards On basis of test data Health hazards Calculation method Environmental hazards Calculation method

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Abbreviations and acronyms used:

BCF: Bioconcentration factor.

CEN: European Committee for Standardization.

DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be

considered a tolerable minimum.

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not

anticipated.

EC50: Half maximal effective concentration.

PPE: Personal protection equipment.

LC50: Lethal concentration, 50%.

LD50: Lethal dose, 50%.

NOEC: No observed effect concentration.

Key literature references and sources for data:

http://eur-lex.europa.eu/homepage.html

http://echa.europa.eu/ Regulation (EU) 2020/878. Regulation (EC) No 1907/2006. Regulation (EC) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemical substances and mixtures (REACH).

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.