ACTIFLOW Ca560

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)
Revision date: 1/17/2025 Supersedes: 3/14/2024 Version: 2.1

SECTION 1: Identification

1.1. GHS Product identifier

Product form : Mixture
Product name : ACTIFLOW Ca560

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Fertilizer

1.4. Supplier's details

AGRONUTRITION SAS
Parc Activestre 3 avenue de l'Orchidée
31390 CARBONNE
France
T +33 (0)5 61 97 85 00 - F +33 (0)5 61 97 85 01
fds-msds@agro-nutrition.fr - www.agronutrition.com

1.5. Emergency phone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
France	ORFILA		+33 1 45 42 59 59	This number automatically directs calls to the nearest poison control center, based on the caller's location. These poison and toxicovigilance centers provide free medical assistance (excluding call costs), 24 hours a day, 7 days a week.

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Hazardous to the aquatic environment – Acute Hazard, Category 3	H402	Calculation method
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412	Calculation method

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects : Harmful to aquatic life with long lasting effects.

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Signal word (GHS UN) : -
Hazard statements (GHS UN) : H412 - Harmful to aquatic life with long lasting effects
Precautionary statements (GHS UN) : P102 - Keep out of reach of children.
P264 - Wash hands hands thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, eye protection.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
zinc oxide	CAS-No.: 1314-13-2	1 – 5	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Manganese carbonate	CAS-No.: 598-62-9	1 – 5	Aquatic Acute 2, H401
2-methylpentane-2,4-diol	CAS-No.: 107-41-5	0.1 – 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361

Full text of H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after inhalation : Move the affected person to the fresh air. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact : Wash off with plenty of water. If case of redness or irritation, call a doctor.
First-aid measures after eye contact : In case of eye contact, immediately rinse with clean water for 20-30 minutes. Consult an ophtalmologist if irritation persists.
First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Get medical advice/attention.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : None known.
Symptoms/effects after skin contact : Contact during a long period may cause light irritation.
Symptoms/effects after eye contact : Redness.
Symptoms/effects after ingestion : None known.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : In case of fire: Water spray. Water mist. Foam. Powders. Carbon dioxide (CO2).
Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

5.2. Specific hazards arising from the chemical

Fire hazard : Not flammable.
Explosion hazard : Not explosive.
Hazardous decomposition products in case of fire : Carbon dioxide (CO2). Carbon monoxide (CO). Metallic oxides.

5.3. Special protective actions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Avoid contact with skin and eyes. In case of important spillage : Evacuate unnecessary personnel. Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Contain the spilled material by bunding. Do not allow to enter drains or water courses.

6.3. Methods and materials for containment and cleaning up

For containment : Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite.
Methods for cleaning up : Clean preferably with a detergent - Avoid the use of solvents.
Other information : Dispose of contaminated materials in accordance with current regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Wear personal protective equipment. Observe the label precautions.
Hygiene measures : Always wash hands after handling the product. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Store in a dry, cool and well-ventilated place. Keep out of the reach of children. Protect from heat and direct sunlight. Keep out of frost.
Packaging materials : Store always product in container of same material as original container.
Storage temperature : < 35 °C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure that there is a suitable ventilation system.
Environmental exposure controls : Do not allow into drains or water courses.
Other information : Do not eat, drink or smoke when using this product.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : In case of repeated or prolonged contact wear gloves. Type : Latex. Nitrile rubber. PVC gloves. Butyl rubber
Eye protection : Wear security glasses which protect from splashes. (EN 166)
Skin and body protection : Wear suitable protective clothing

Personal protective equipment symbol(s)

8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Suspension concentrate (SC)
Colour	:	white. Beige. Opaque.
Odour	:	Organic.
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	Not available
Boiling point	:	> 90 °C (ISO 3405)
Flammability	:	Not flammable
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	> 93 °C (ISO 3679)
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	8.3 – 9.8
pH solution	:	8.8 – 10 (1% in water)
Viscosity, kinematic (calculated value) (40 °C)	:	Not available
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	1.69 +/- 1,5%
Relative vapour density at 20°C	:	Not available
Solubility	:	Soluble in water.
Particle size	:	Not applicable

9.2. Data relevant with regard to physical hazard classes (supplemental)

Explosive properties	:	Not explosive
Oxidising properties	:	Non oxidizing
Other properties	:	Efflux time : 30-75 s.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable in use and storage conditions as recommended in item 7.

10.3. Possibility of hazardous reactions

To our knowledge, the product does not present any particular risk, under normal conditions of use.

10.4. Conditions to avoid

Heat. Freezing.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

zinc oxide (1314-13-2)	
LD50 oral rat	> 5000 mg/kg (OECD 423 method)
LD50 dermal rat	> 2000 mg/kg (OECD 402 method)
LC50 Inhalation - Rat	> 5.7 mg/l/4h (OECD 403 method)

2-methylpentane-2,4-diol (107-41-5)	
LD50 oral rat	> 2000 mg/kg (OECD 420 method)
LD50 dermal rat	> 2000 mg/kg (OECD 402 method)

Manganese carbonate (598-62-9)	
LD50 oral rat	> 2000 mg/kg (OECD 420 method)
LC50 Inhalation - Rat	> 5.35 mg/l air (4 Hours) (OECD 403 method)

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met).
pH: 8.3 – 9.8
Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: 8.3 – 9.8
Respiratory or skin sensitization : Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute) : Harmful to aquatic life.
Classification procedure (Hazardous to the aquatic environment, short–term (acute)) : Calculation method
Hazardous to the aquatic environment, long–term (chronic) : Harmful to aquatic life with long lasting effects.
Classification procedure (Hazardous to the aquatic environment, long–term (chronic)) : Calculation method

2-methylpentane-2,4-diol (107-41-5)	
LC50 - Fish [1]	9450 mg/l (96 Hours) (Oncorhyncus mykiss) (OECD 203 method)
EC50 - Crustacea [1]	5410 mg/l (48 Hours) (Daphnia magna) (OECD 202 method)
ErC50 algae	> 429 mg/l (72 Hours) (Scenedesmus capricornutum) (OECD 201 method)

Manganese carbonate (598-62-9)	
LC50 - Fish [1]	3.17 mg/l (96 Hours) (Oncorhynchus mykiss)
EC50 - Crustacea [1]	> 3.6 mg/l (48 Hours) (Daphnia magna) (OECD 202 method)
EC50 72h - Algae [1]	> 2.2 mg/l (Pseudokirchneriella subcapitata) (OECD 201 method)
ErC50 algae	> 2.2 mg/l (72 Hours) (Raphidocelis subcapitata) (OECD 201 method)

12.2. Persistence and degradability

ACTIFLOW Ca560	
Persistence and degradability	Not rapidly degradable

zinc oxide (1314-13-2)	
Persistence and degradability	Not rapidly degradable

2-methylpentane-2,4-diol (107-41-5)	
Persistence and degradability	Readily biodegradable.

Manganese carbonate (598-62-9)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

ACTIFLOW Ca560	
Bioaccumulative potential	No additional information available

12.4. Mobility in soil

ACTIFLOW Ca560	
Mobility in soil	No additional information available

12.5. Other adverse effects

Ozone : Not classified (Based on available data, the classification criteria are not met)
Other adverse effects : No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Recycle or dispose of in compliance with current legislation. Dispose of at a licensed waste collection centre. Do not discharge into drains or the environment.
Product/Packaging disposal recommendations : Empty the packaging completely prior to disposal. Do not remove label until container is thoroughly cleaned. Dispose of at an licensed site.

SECTION 14: Transport information

In accordance with RTMD ONU / IMDG / IATA

UN RTDG	IMDG	IATA
14.1. UN number		
Not applicable	Not applicable	Not applicable
14.2. UN Proper Shipping Name		
Not applicable	Not applicable	Not applicable

UN RTDG	IMDG	IATA
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Not applicable	Not applicable	Not applicable
No supplementary information available		

14.6. Special precautions for user

UN RTDG
Not applicable

IMDG
Not applicable

IATA
Not applicable

14.7. Transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

SECTION 16: Other information

Revision date : 1/17/2025
Supersedes : 3/14/2024

Indication of changes:
Physical and chemical properties.

Abbreviations and 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
EC50 - Median effective concentration
LC50 - Median lethal concentration
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
ED - Endocrine disruptor
EN - European Standard
SDS - Safety Data Sheet
IATA - International Air Transport Association
IMDG - International Maritime Dangerous Goods
LD50 - Median lethal dose
CAS-No. - Chemical Abstract Service number
EC-No. - European Community number
PBT - Persistent Bioaccumulative Toxic
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

OEL - Occupational Exposure Limit
vPvB - Very Persistent and Very Bioaccumulative

Full text of H-statements:	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Acute 2	Hazardous to the aquatic environment – Acute Hazard, Category 2
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H315	Causes skin irritation
H319	Causes serious eye irritation
H361	Suspected of damaging fertility or the unborn child
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Safety Data Sheet (SDS), UN

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.