SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

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

1.1. Product identifier

Product name : ACTIFLOW Mn560

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

Use for agriculture (nutrients/ trace elements for plants)

1.3. Details of the supplier of the safety data sheet

Registered company name : AGRO-NUTRITION SAS.

Address : Parc Activestre - 3 avenue de l'Orchidee.31390.CARBONNE.FRANCE.

Telephone : 33 (0) 5 61 97 85 00. Fax : 33 (0) 5 61 97 85 01.

fds@agro-nutrition.fr

http://www.agronutrition.com

1.4. Emergency telephone number : +33 (0)1 45 42 59 59.

Association/Organisation : INRS / ORFILA http://www.centres-antipoison.net.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

May produce an allergic reaction (EUH208).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Additional labeling :

EUH208	Contains MIXTURE OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2HISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1). May produce an allergic reaction.
EUH210	Safety data sheet available on request.

Precautionary statements - General :

P102	Keep out of reach of children.

Precautionary statements - Prevention :

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.

Precautionary statements - Disposal :

P501	Dispose of contents/ container to an approved waste disposal plant.

Other information :

2.3. Other hazards

The mixture does not contain substances classified as ‘Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

|>SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

|> Composition :

Identification	(EC) 1272/2008	Note	%
INDEX: 613-167-00-5 CAS: 55965-84-9 MIXTURE OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2HISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)	GHS06, GHS05, GHS09 Dgr Acute Tox. 3, H331 Acute Tox. 3, H311 Acute Tox. 3, H301 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410 M Chronic = 1		0 <= x % < 0.0015

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

bring the packaging, label or Material Safety Data when you call the emergency number, a poison control center or doctor

4.1. Description of first aid measures

In the event of exposure by inhalation :

In the event of an allergic reaction, seek medical attention.

Remove the victim to fresh air. In case of respiratory problems, consult a doctor/medical service.

In the event of splashes or contact with eyes :

Flush immediately with plenty of water for 15 minutes keeping the eyelids open. If there is any pain, redness or visual impairment, consult an ophthalmologist.

Reset contact lenses

In the event of splashes or contact with skin :

In the event of an allergic reaction, seek medical attention.

Wash with plenty of water and soap. In case of redness or irritation, consult a doctor/medical service.

In the event of swallowing :

Seek medical attention, showing the label.

Give nothing by mouth. Do not induce vomiting.

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

Symptoms/lesions after inhalation: cough,respiratory tract irritation.

Symptoms/lesions after skin contact: skin irritation, redness.

Symptoms/lesions after eye contact: corrosion, irritation of the eye tissues.

Symptoms/lesions after ingestion: abdominal pain, nausea.

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

Treat symptomatically.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- foam
- powder
- carbon dioxide (CO2)

The choice of the method depends on the other products present.

Do not use a strong water jet, danger of spreading of the product.

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon dioxide (CO_2)

5.3. Advice for firefighters

Precautions against fire: like in case of all fires involving chemicals, wear appropriate protective equipment (chemical protective clothing, boots and gloves).

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

If spill is large, evacuate all personnel and only allow intervention by trained operators and equipped with individual protection equipment appropriate (refer to Section 8).

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

If the product contamines waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

Accidental, ventilate the area and recovered by pumping the product for re-use (preferably) spill. If the operation of pumping is not suitable, cover the product dry sand or vermiculite. Mix and make its removal by scanning. Transfer to a suitable container (dumpster) properly labeled and proceed to disposal by a company authorized to waste collection.

6.4. Reference to other sections

See section 1 for information about emergency contact.

Se section 13 for obtain additional information on waste treatment.

See section 8 for information on personal protection equipments.

|>SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

|> 7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Avoid inhalation of dust

Fire prevention :

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep out of reach of children.

Keep away from food, drink and animal feedingstuffs.

Storage temperature: 0-35°C

Packaging

Always keep in packaging made of an identical material to the original.

Replace the label in case of split of packaging.

7.3. Specific end use(s)

No data available.

|>SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

|> 8.1. Control parameters

No data available.

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

|> - Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Natural latex
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVC (polyvinyl chloride)
- Butyl Rubber (Isobutylene-isoprene copolymer)

Recommended properties :

- Impervious gloves in accordance with standard EN374

|> - Body protection

Suitable type of protective clothing :

Wear suitable protective clothing, in particular overalls and boots. These items must be kept in good condition and cleaned after use.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Type of FFP mask :

Wear a disposable half-mask aerosol filter in accordance with standard EN149.

Category :

- FFP2

If the setting eouvre the product and its application (spray atomization) is generating aerosol or fine particles liquids, it is recommended to wear a respirator, properly fitted.

Exposure controls linked to environmental protection

Do not discharge into drains, surface waters or soil. Recover accidentally quantities of common ground products. Remove waste in accordance with local and national regulations.

|>SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

|> General information :

Physical state :	Fluid liquid.
Odor	light
State	Concentrated suspension (SC)

Important health, safety and environmental information

pH (aqueous solution) :	9 +/-0.6 (10g/l)
pH :	9.10 +/-0.6.
	Slightly basic.
Boiling point/boiling range :	Not relevant.

Flash point interval :	Not relevant.
Vapour pressure (50°C) :	Not relevant.
Density :	1930 (+/-1.5%) g/dm3
Water solubility :	Soluble.
Melting point/melting range :	Not relevant.
Self-ignition temperature :	Not relevant.
Decomposition point/decomposition range :	Not relevant.

9.2. Other information

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

According to our knowledge, this product does not present any particular hazard under normal conditions of use and storage.

10.4. Conditions to avoid

Avoid :

- frost

10.5. Incompatible materials

Keep away from :

- strong acids
- strong oxidising agents

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon dioxide (CO2)

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No data available.

11.1.1. Substances

No toxicological data available for the substances.

11.1.2. Mixture

Acute toxicity :

No data on the product itself is available. However according to the representative components, it is possible to provide: Oral LD50 (rat)> 2000mg/kg

Skin corrosion/skin irritation :

Slight erythema observed or no irritant effect.

Serious damage to eyes/eye irritation :

Little or non irritating to the ocular tissue .

Respiratory or skin sensitisation :

Contains at least one sensitising substance. May cause an allergic reaction.

Germ cell mutagenicity :

No evidence of this effect was found.

Carcinogenicity :

No evidence of this effect was found

Reproductive toxicant :

No evidence of this effect was found.

SECTION 12 : ECOLOGICAL INFORMATION

The mineral elements (nutrients) contained in this product are essential for healthy plant growth, but may be harmful in large quantities to wildlife, aquatic organisms or sensitive plants. It is therefore necessary to minimize the amount of product released into the environment, except as part a rational fertilization program for the plants, preferably after a test for soil and/or plant issues.

12.1. Toxicity

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.2. Mixtures

Ensure that all flow is not driven into the aquatic environment or in any égoput or drain. When using, do not spill the product beyond the acreage (hedges, edges, ditches, streams).

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

Local arrangements :

submit to an approved disposal.

Codes of wastes (Decision 2001/573/EC, Directive 2006/12/EEC, Directive 94/31/EEC on hazardous waste) :

06 03 14 solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13

|>SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2015 - IMDG 2014 - ICAO/IATA 2015).

|>SECTION 15 : REGULATORY INFORMATION

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

|> **- Classification and labelling information included in section 2:**

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 1297/2014.

- Container information:

No data available.

- Particular provisions :

No data available.

|> Substances that deplete the ozone layer (EC Regulation No. 1005/2009, Montreal Protocol) :

N/A

15.2. Chemical safety assessment

No data available.

|>SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

The information contained in this MSDS was obtained from sources which we believe are reliable and corresponds to the current state of our knowledge and experience of the product and is not exhaustive. This applies to product which conforms to the specifications, unless otherwise stated. In case of formulations or mixtures, make sure that no new dangers can not be produced.

The product should not be used for other purposes than those specified under section 1. Attention of users is drawn to the possible risks incurred when a product is used for purposes other than those for which it was designed, without the prior written handling instructions.

This complements the technical sheets but does not replace plug. Is not exempt under any circumstances, the product user to comply with all laws, regulations and procedures relating to the product, safety, hygiene and protection human health and the environment.

|> Wording of the phrases mentioned in section 3 :

H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H331	Toxic if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

|> Abbreviations :

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefahrdungsklasse (Water Hazard Class).

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.