

# Ammonium Sulphate Horticultural Grade

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1Product identifierProduct NameVan Iperen Ammonium Sulphate Horticultural GradeCAS-No7783-20-2EC-No231-984-1REACH Registration Number 01-2119455044-46

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

Recommended UseFlame retardant, Fertilizers, Laboratory Chemicals

Uses advised against No information available

#### 1.3. Details of the supplier of the safety data sheet

Van Iperen International BV Smidsweg 24 3273 LK Westmaas - Nederland T +31 (0) 186 578 888 - F +31 (0) 186 573 452 info@iperen.com - www.vaniperen.com

#### 1.4. Emergency telephone number

In case of emergency contact the national emergency telephone number:

UK and Ireland: 112 or 999

Country	Official advisory body	Address	Emergency number
Ireland (Republic of)	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	: +353 1 8379964
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241

### SECTION 2: Hazards identification

# 2.1 Classification of the substance or mixture

Classification (1272/2008/EC) Not classified. Classification according to EU Directives 67/548/EEC or 1999/45/EC Not classified.

#### 2.2 Label elements

None.

#### 2.3 Other hazards

Ensure adequate ventilation, especially in confined areas.

#### SECTION 3: Composition/information on ingredients

3.1. Substances							
Chemical Name	EC-No	CAS-No	Weight %	Classification (67/548/EEC)	Classification (1272/2008/EC)	REACH Registration Number	
Ammonium sulfate	231-984-1	7783-20-2	100	_	-	01-2119455044-4 6	

# SECTION 4: First aid measures

## 4.1 Description of first aid measures

General advice No hazards which require special first aid measures.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention immediately if symptoms occur.

Skin contact Wash off immediately with plenty of water. Remove contaminated clothing and shoes.

Get medical attention immediately if symptoms occur.

Ingestion Clean mouth with water, Drink 1 or 2 glasses of water. Do not induce vomiting without medical advice. Get medical attention immediately if symptoms occur.

Inhalation Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately if symptoms occur. Symptoms may be delayed.

Protection of first-aiders Use personal protective equipment. Avoid contact with skin, eyes and clothing.

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

Main symptoms Effects of contact or inhalation may be delayed. Burning feeling and temporary redness, Coughing and/or wheezing.

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

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Notes to physician Treat symptomatically. Effects of contact or inhalation may be delayed. SECTION 5: Firefighting measures						
5.1 Extinguishing media						
Suitable extinguishing media	The product itself does not burn. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.					
Extinguishing media which must not be used for safety reasons	None known.					
5.2 Special hazards arising from the substance or mixture						
Special hazard	Hazardous decomposition products formed under fire conditions: Sulphur oxides, Nitrogen oxides					

#### 5.3 Advice for firefighters

Special protective equipment for fire-fighters Wear self-contained breathing apparatus and protective suit.

#### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Evacuate non-essential personnel. Ensure adequate ventilation. Avoid airborne dust generation, wear personal protective equipment in compliance with national legislation. Avoid contact with skin, eyes and clothing.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

(NO x), ammonia, amines.

#### 6.3 Methods and material for containment and cleaning up

Take up mechanically and collect in suitable container for disposal. Avoid dust formation.

#### 6.4 Reference to other sections

See sections 8 and 13.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Do not enter areas where used or stored until adequately ventilated. Wear personal protective equipment. Do not breathe dust. Do not eat, drink or smoke when using this product.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Keep containers tightly closed in a dry, cool and well-ventilated place. Do not enter areas where used or stored until adequately ventilated. Keep away from direct sunlight, heat, flames and sparks. Incompatible with oxidising agents, alkali metals.

#### 7.3 Specific end use(s)

Exposure Scenario Not available. Other information Not available.

## SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

0.1 CONTROL	parameters							
Exposure limits	Contains no substa	ances with occupat	ional exposure limi	t values.				
Derived No Effect L	_evel (DNEL)							
For: Workers.	· · · ·							
Chemical Name	Long-term exposur Systemic effects – Inhalation-		erm exposure ic effects-	Acute / short-term e - Systemic effects - Inhalation	exposure	hort-term ex c effects -	posure ·	
Ammonium sulfate	11.167 mg/m³	42.667	mg/kg bw/d					
Predicted No Effect	t Concentration (PN	EC)						
Chemical Name	Freshwater	Marine water	Intermittent release	Sewage treatment plant	Freshwat sediment	 Marine sediment	Soil	Oral
Ammonium sulfate	0.312 mg/L	0.0312 mg/L	0.53 mg/L	16.18 mg/L	0.063 mg	Securiterit	62.6 m	g/kg dw

#### 8.2 Exposure controls

Appropriate engineering controlsEnsure adequate ventilation, especially in confined areas.Individual protection measures, such as personal protective equipmentEye protectionTightly fitting safety gogglesHand protectionProtective gloves: Butyl rubber, PVC, Break through time: 4 - 8 hours. Glove thickness: 5 mil.Skin and body protectionLong sleeved clothingRespiratory protectionIn case of insufficient ventilation wear suitable respiratory equipment: Effective dust mask.Recommended filter typeP2

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Hygiene measures Handle in accordance with good industrial hygiene and safety practice. Environmental Exposure Controls The product should not be allowed to enter drains, water courses or the soil.

### SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties Physical state @20°C Solid Appearance No information available Colour Off-white / Yellow-brownish Odourless Odour pН 5-6 (5% w/w) Melting/freezing point Decomposes @ >235 °C Boiling point/boiling range Decomposes @ >235 °C Flash point Not applicable Evaporation rate No information available Flammability (solid, gas) No information available Flammability Limits in Air No information available Vapour pressure No information available Vapour density No information available Relative density 1.78 (water=1) Solubility Water solubility 7.6 g/l Partition coefficient (n-octanol/water) -5.1 No information available Autoignition Temperature Decomposition temperature > 235 °C No information available Viscosity, dynamic No information available Explosive properties **Oxidising Properties** No information available

#### 9.2 Other information

Bulk density Granulated: 1000 - 1060 kg/m<sup>3</sup>

#### SECTION 10: Stability and reactivity

# **10.1 Reactivity** No information available.

#### 10.2 Chemical stability

Stable under normal conditions.

## 10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

# **10.4** Conditions to avoid Heat, flames and sparks.

#### 10.5 Incompatible materials

Nitrites, alkalis.

#### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions: Sulphur oxides, nitrogen oxides (NO x), ammonia, amines.

## SECTION 11: Toxicological information

11.1 Information on toxicological effects Acute toxicity						
Ingestion	No known effect.					
Skin contact	No known effect.					
Inhalation	No known effect.					
Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation			
Ammonium sulfate	4250 mg/kg (Rat, OECD 401)	>2000 mg/kg (Rat, OECD 434)	> 900 mg/m3 (Guinea pig, 8h)			
>2000 mg/kg (Rat, OECD 423)						
Skin corrosion/irritation Non-irritating (rabbit, OECD 404).						
Serious eye damage/irritation Non-irritating. Dust contact with the eyes can lead to mechanical irritation.						
Respiratory or skin sensitisation Did not cause sensitisation on laboratory animals (guinea pig).						
Germ cell mutagenicity Not known to cause heritable genetic damage (OECD 471, OECD 476, OECD 473).						
Carcinogenicity Contains no ingredient listed as a carcinogen, OECD 453: Negative.						
Reproductive toxicity Not known to adversely affect reproductive functions and organs. Not known to cause						



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birth defects or have a deleterious effect on a developing fetus.STOT-single exposureNo known effect.STOT-repeated exposureNo known effect.Aspiration hazardNo known effect.

# SECTION 12: Ecological information

# 12.1 Toxicity

Contains no substances known to be hazardous for the environment. Chemical Name Toxicity to algae Toxicity to fish Toxicity to microorganisms

Ammonium sulfate

LC50: 460 - 1000 mg/L Leuciscus idus, 96 h static LC50: 250 mg/L Brachydanio rerio, 96 h LC50: 480 mg/L Brachydanio rerio, 96 h flow-through LC50: 420 mg/L Brachydanio rerio, 96 h semi-static LC50: 18 mg/L Cyprinus carpio, 96 h LC50: 100 mg/L Pimephales promelas, 96 h LC50: 32.2 - 41.9 mg/L Oncorhynchus mykiss, 96 h flow-through LC50: 5.2 - 8.2 mg/L Oncorhynchus mykiss, 96 h static LC50: 123 - 128 mg/L Poecilia reticulata, 96 h semi-static LC50: 126 mg/L Poecilia reticulata, 96 h

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Toxicity to daphnia and other aquatic invertebrates EC50: 423 mg/L Daphnia magna, 24 h LC50: 14 mg/L Daphnia magna, 48 h

#### **12.2 Persistence and degradability** No information available.

12.3 Bioaccumulative potential

Bioaccumulation is unlikely. Chemical Name Ammonium sulfate

Bioconcentration factor (BCF)

## 12.4 Mobility in soil

No information available.

#### 12.5 Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

#### 12.6 Other adverse effects

No information available.

# SECTION 13: Disposal considerations

## 13.1 Waste treatment methods

Waste from residues / unused products

Dispose of in accordance with local regulations. Should not be released into the environment. Where possible recycling is preferred to disposal or incineration.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal

## **SECTION 14: Transport information**

According to: ADR, RID, ADN, IMDG, ICAO. 14.1 UN number Not regulated.

# **14.2 UN proper shipping name** Not regulated.

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**14.3 Transport hazard class(es)** Not regulated.

**14.4** Packing group Not applicable.

**14.5 Environmental hazards** Not applicable.

**14.6** Special precautions for user Not applicable.

**14.7** Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable (Non-hazardous substance).

#### SECTION 15: Regulatory information

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

Restrictions on use None. Other regulations None.

#### 15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

# SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3 Not applicable Full text of H-Statements referred to under sections 2 and 3 Not applicable (E)EC: European Commission Abbreviations/acronyms REACH: Registration, Evaluation, Authorisation and Restriction of Chemical substances STOT: Specific Target Organ Toxicity PBT: Persistent, Bioaccumulating, Toxic vPvB: very Persistent and very Bioaccumulating ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route RID: Regulations for the International Transport of Dangerous Goods by Rail ADN: Accord européen relatif au transport international des marchandises Dangereuses par voies de Navigation intérieures IMDG: International Maritime Dangerous Goods Code ICAO: International Civil Aviation Organization **Revision Note** Emergency telephone, Predicted No Effect Concentration (PNEC), Toxicological information, Ecotoxicity, Workers must be trained in the proper use and handling of this product as required **Training Advice** under applicable regulations.

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

#### **Company disclaimer**

The information provided in this 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 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 proceed, unless specified in the text.