

**Safety Data Sheet**

Conforms to 1907/2006/EC

Version 3

Issue date 10-8-2009

**Nutramon**

**1 Identification of the substance/preparation and of the company/undertaking**

<b>Commercial product name</b>	Nutramon		
<b>Common chemical name</b>	Calcium ammonium nitrate		
<b>Synonyms</b>	Calcium ammonium nitrate 27 (+4)		
<b>Chemical formula</b>	27%N + 4%MgO		
<b>Use of the substance/preparation</b>	EC FERTILISER		
<b>EU category number</b>			
<b>Company name</b>	DSM Agro B.V.		
<b>Company address</b>	P.O. Box 601 6160 AP Geleen The Netherlands		
<b>Company telephone</b>	(31) 46 476 00 55		
<b>Company e-mail</b>	<a href="mailto:dsm.agro@dsm.com">dsm.agro@dsm.com</a>		
<b>Emergency telephone</b>	(31) 46 476 55 55	24/24 hours	7/7 days

**2 Hazards identification**

<b>Physical/chemical hazards</b>	
<b>Environmental hazards</b>	Slightly harmful to the aquatic environment.
<b>Effect(s) of (over)exposure</b>	
<b>Symptom(s) of (over)exposure</b>	Dust may cause mechanical irritation.
<b>Inhalation</b>	Over-exposure by inhalation may cause respiratory irritation. (coughing)
<b>Ingestion</b>	After intake of large quantities: Can cause gastrointestinal disturbances.
<b>Skin contact</b>	Slightly irritating to the skin. (redness).
<b>Eye contact</b>	May cause eye irritation. (redness).

**3 Composition/information on ingredients**

Hazardous ingredients					
Chemical name	CAS no.	EC no.	% (w/w)	Symbol	R phrases
Ammonium nitrate	6484-52-2	229-347-8	78	-	-
Other ingredients					
Chemical name	CAS no.	EC no.	% (w/w)	Symbol	R phrases
Dolomite	16389-88-1	240-440-2	21	-	-
additives/inert fillers			1		
<i>EC no. means EINECS or ELINCS number.</i>					

**4 First aid measures**

<b>General</b>	
<b>Inhalation</b>	If inhaled, remove to fresh air. Obtain medical attention if symptoms occur.
<b>Ingestion</b>	If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Obtain medical attention if symptoms occur.
<b>Skin contact</b>	Rinse with plenty of running water. Remove contaminated clothing and shoes. Obtain medical attention if symptoms occur.

	Eye contact	Rinse with plenty of running water. Obtain medical attention if symptoms occur.
	Note to physician	methaemoglobinaemia
<b>5</b>	<b>Fire-fighting measures</b>	
	Suitable extinguishing media	
	Small fire	Non-combustible. Water
	Large fire	Non-combustible. Water
	Extinguishing media not to be used	
	Unusual fire and explosion hazards	
	Hazardous thermal decomposition and combustion products	In case of fire, may produce hazardous decomposition products such as nitrogen oxides (NO, NO <sub>2</sub> etc.), ammonia (NH <sub>3</sub> ), amines.
	Special fire fighting procedures	No special measures required. Wear suitable protective clothing. Self-contained breathing apparatus.
<b>6</b>	<b>Accidental release measures</b>	
	Personal precautions	Avoid creating dusty conditions and prevent wind dispersal. Use suitable protective equipment (section 8).
	Environmental precautions	Avoid contact of spilled material with soil and prevent runoff entering surface waterways.
	Methods for cleaning up	
	Small spill and leak	Vacuum or sweep up material and place in a designated, labelled waste container. Clean up affected area with a large amount of water.
	Large spill and leak	Vacuum or sweep up material and place in a designated, labelled waste container. Recycle, if possible. Prevent formation of dust clouds. Clean up affected area with a large amount of water.
	Remarks	
	<i>Note: see section 8 for personal protective equipment and section 13 for waste disposal.</i>	
<b>7</b>	<b>Handling and storage</b>	
	Handling	Use with adequate ventilation. Local exhaust ventilation should be provided. Avoid creating dusty conditions and prevent wind dispersal. Avoid the creation of dust when handling. Avoid contamination by any source including metals, dust and organic materials. Keep away from moisture.
	Storage	Avoid contact with combustible materials. Keep in a cool and dry place. Keep away from hay, grain, diesel etc.
	Specific use(s)	EC FERTILISER
	Packaging materials	iron, Synthetic material Non suitable: Zinc., Copper
	<i>Note: See section 10 for stability and reactivity</i>	
<b>8</b>	<b>Exposure controls / Personal protection</b>	
	Exposure limit values	
	Engineering measures	None required. However, use of adequate ventilation : is good industrial practice.
	Hygienic measures	When using do not eat, drink or smoke. Wash hands after handling compounds and before eating, smoking and using the lavatory and at the end of the day.
	Personal protection	Production scale
	Respiratory system	Wear dust protection mask P2.
	Skin and body	Working clothes.
	Hands	Wear suitable gloves. > 8 hours (breakthrough time): Butyl rubber Neoprene 4-8 hours (breakthrough time): Teflon
	Eyes	Safety glasses with side shields.
	Environmental exposure controls	
	<i>Advice on personal protection is applicable for high exposure levels.</i>	
	<i>Select proper personal protection based on a risk</i>	

9 Physical and chemical properties				
Appearance	Solid. [Granules]			
Color	Brownness			
Odor	Odourless			
Odor threshold				
Molecular weight				
pH	>4.5 (Concentration 10%)			
Boiling point	Decomposes >200 °C			
Melting point/ range	170 °C			
Flash point	Not applicable.			
Flammability	Not applicable.			
Autoignition temperature	Not applicable.			
Decomposition temperature	Not applicable.			
Lower explosion limit	Not applicable.			
Upper explosion limit	Not applicable.			
Minimum ignition energy	Not applicable.			
Critical temperature	Not applicable.			
Relative density				
Density				
Loose bulk density	approx. 1040 kg/m <sup>3</sup>			
Vapour pressure at 20°C				
Vapour density				
Partition coefficient n-octanol/water				
Viscosity				
Mean particle size	3,6 ± 0,2 mm			
Solubility in water	Ammonium nitrate: 192 g/100 ml (20°C) Ammonium nitrate part 100% soluble in water			
Miscibility				
Fat solubility				
Conductivity				
Gas group				
Remarks				
10 Stability and reactivity				
Stability	Stable under recommended storage and handling conditions (see section 7).			
Conditions to avoid	Decomposes on heating. Confinement must be avoided.			
Materials to avoid	Reducing agents, strong acids and bases, metal powders, combustible materials, chromates, zinc, copper and copper alloys, chlorates.			
Hazardous decomposition products	nitrogen oxides (NO, NO <sub>2</sub> )			
11 Toxicological information				
Acute toxicity				
Ingredient name	Test	Species	Route	Result
Ammonium nitrate	LD50	Rat	Dermal	>5000 mg/kg
	LD50	Rat	Oral	2950 mg/kg
	LD50	Rat	Oral	2800 mg/kg
	LD50	Rat	Oral	2462 mg/kg
	LD50	Rat	Oral	2217 mg/kg
	LC50	Rat	Inhalation dusts and mists	88 mg/L ( 4 hours)
Irritation				
Sensitization				
Chronic toxicity		No known significant effects or critical hazards.		
Carcinogenicity		No known significant effects or critical hazards.		
Reproductive toxicity		No known significant effects or critical hazards.		

Mutagenicity						
Ingredient name	Test	Experiment	Result			
Ammonium nitrate	-	In vitro; Bacteria; yes and no: same result	Negative			
Classification						
Ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Ammonium nitrate	-	2A	-	-	-	-
Remarks		Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. Methaemoglobinaemia				

12 Ecological information						
Ingredient name		Aquatic half-life	Photolysis	Biodegradability		
Ammonium nitrate		-	-	readily		
Ingredient name		Test	Period	Result		
Ammonium nitrate		Daphnia (EC50) Algae (IC50) Fish (LC50)	48 hours 72 hours 96 hours	10-100 mg/L 10-100 mg/L 10-100 mg/L		
Ingredient name		LogPow	Bio-concentration factor	Bioaccumulative potential		
Ammonium nitrate		-3.1	-	low		
Mobility		For data on physical state and solubility see section 9.				
Persistence and degradability		Readily biodegradable This product shows a low bioaccumulation potential.				
Bioaccumulative potential		The product does not contain organically bound halogens which could lead to an AOX value in waste water.				
Ecotoxicity						

13 Disposal considerations	
<b>Responsibility of the receiver to have knowledge of national and local regulations.</b>	
Methods of disposal	Waste must be disposed of in accordance with national and local environmental regulations. Controlled biodegradation in waste water treatment is possible.

14 Transport information						
Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
ADR/RID Class	Not regulated.	Calcium ammonium nitrate	-	-	-	-
ADNR Class	Not regulated.	Calcium ammonium nitrate	-	-	-	-
IMDG Class	Not regulated.	Calcium ammonium nitrate	-	-	-	-
IATA Class	Not regulated.	Calcium ammonium nitrate	-	-	-	-

<b>15</b>	<b>Regulatory information</b>	
	<b>Responsibility of the receiver to have knowledge of national and local regulations.</b>	
	<b>EU regulations</b> <b>Hazard symbol</b> <b>R- and S phrases</b> <b>National Fire protection Association (U.S.A)</b>	<b>EC FERTILISER</b> According to EU Directives 67/548/EEC and 1999/45/EC this product does not require labelling. According to EU Directives 67/548/EEC and 1999/45/EC this product does not require labelling.
<b>16</b>	<b>Other information</b>	
	<b>Risk phrases</b> <b>Safety phrases</b> <b>Symbols</b> <b>Storage classification</b> <b>Date previous SDS</b> <b>Modifications in this version</b> <b>References</b>	- - - - 1-10-2007 Adress change
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