

## **Ammonium Nitrate Solution**

Version 1.01 Revision Date 12.04.2023

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

**Product identifier** 

Trade name Ammonium Nitrate Solution

Synonyms ANO Water

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

**Use** Raw material for fertilizers.

Manufacturer or supplier's details

Company Sasol Chemicals, a division of Sasol South Africa Ltd

Address Sasol Place, 50 Katherine Street

Sandton 2090 South Africa

Telephone +27103445000

E-mail address sasolchem.info.sa@sasol.com

Emergency telephone number +44 (0)1235 239 670 (Europe, Israel, Africa, Americas)

+44(0)1235 239 671 (Middle East, Arabic African countries)

+65 3158 1074 (Asia Pacific) +86 400 120 6011 (China)

+27 (0)17 610 4444 (South Africa) 0800 112 890 RSA-Local only +61 (2) 8014 4558 (Australia)

## SECTION 2. Hazards identification

#### Classification of the substance or mixture

#### REGULATION (EC) No 1272/2008

Classification Oxidizing liquids Category 3

Label elements



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## **REGULATION (EC) No 1272/2008**

Hazard pictograms

Signal word : Warning

**Hazard statements** : H272 May intensify fire; oxidizer.

**Precautionary statements** 

Prevention P210 Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

P220 Keep away from clothing and other combustible materials.

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

protection/ hearing protection.

**Response** P370 + P378 In case of fire: Use water spray, alcohol-resistant foam,

dry chemical or carbon dioxide to extinguish.

Storage NA: No precautionary statement

Disposal P501 Dispose of contents/ container to an approved facility in

accordance with local, regional, national and international regulations.

Other hazards

None known.

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

## **HAZARDOUS INGREDIENTS**

**Ammonium Nitrate** 

Contents: >= 56.00 - <= 60.00 %W/W

**CAS-No.** 6484-52-2 **Index-No. EC-No.** 229-347-8

Hazard statements H272 H319



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#### SECTION 4. First aid measures

## Description of necessary first-aid measures

**Inhalation** Move to fresh air in case of accidental inhalation of vapours. If

breathing is irregular or stopped, administer artificial respiration. If symptoms persist, call a physician.

Skin contact Wash off immediately with plenty of water for at least 15

minutes. If symptoms persist, call a physician.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes. Remove contact lenses. If eye irritation

persists, consult a specialist.

**Ingestion** Never give anything by mouth to an unconscious person. DO

NOT induce vomiting unless directed to do so by a physician or

poison control center. Call a physician immediately.

#### Most important symptoms/effects, acute and delayed

Refer to SECTION 11

### SECTION 5. Firefighting measures

**Suitable extinguishing** Dry powder. Dry chemical. Carbon dioxide. Halons Water.

media

**Unsuitable extinguishing** Do not use a chemical, foam or attempt to smother the fire with

media steam or sand.

Special hazards arising The product itself does not burn. Evacuate personnel to safe from the substance or areas. Dangerous gases or fumes may occur in case of fire.

**mixture** Vapours may form explosive mixtures with air.

Special protective Wear self-contained breathing apparatus and protective suit. In

**equipment for firefighters** the event of fire and/or explosion do not breathe fumes.

#### SECTION 6. Accidental release measures



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**Personal precautions** Remove all sources of ignition. Do not breathe spray mist

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent

product from entering drains. Do not contaminate surface water. If the product contaminates rivers and lakes or drains

inform respective authorities.

Methods for cleaning up Shovel into suitable container for disposal. Keep in suitable,

closed containers for disposal.

Reference to other sections Refer to section 8 and 13

#### SECTION 7. Handling and storage

**Safe handling advice** Wear personal protective equipment.

Advice on protection Keep away from combustible material.

against fire and explosion

Requirements for storage Keep away from incompatibles. Store in a dry, well ventilated

areas and containers place away from sources of heat, ignition and direct

sunlight. Provide sufficient air exchange and/or exhaust in work

rooms.

Advice on common storage No data available.

#### SECTION 8. Exposure controls/personal protection

#### Components with workplace control parameters

## NATIONAL OCCUPATIONAL EXPOSURE LIMITS

Contains no substances with occupational exposure limit values.

#### **Exposure controls**

## **Engineering measures**

Provide sufficient air exchange and/or exhaust in work rooms.



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### Personal protective equipment

**Respiratory protection** In case of insufficient ventilation, use dust mask.

**Hand protection** Gloves suitable for permanent contact.:

Material: butyl-rubber
Break through time: 4 h
Material thickness: 0.5 mm

**Eye protection** Safety glasses with side-shields.

**Skin and body protection** Safety shoes. Lightweight protective clothing

Hygiene measures Wash hands before breaks and immediately after handling the

product. Keep away from food and drink.

## SECTION 9. Physical and chemical properties

#### Information on basic physical and chemical properties

Form Liquid

State of matter Liquid; at 20 ° C; 1,013 hPa

Colourlight brownOdourAmmoniacal

Odour Threshold No data available.

**pH** 4.5 - 6.5

Melting point/range No data available.

**Boiling point/boiling range** 142 ° C; No data available.

Flash point Not applicable. **Evaporation rate** No data available. Flammability (solid, gas) No data available. No data available. Auto-ignition temperature Lower explosion limit No data available. Upper explosion limit No data available. No data available. Vapour pressure Relative vapour density No data available. 1,260 kg/m3; 20 ° C **Density** Water solubility Completely miscible

octanol/water

Partition coefficient: n-

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No data available.



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**Viscosity, kinematic** No data available.

#### SECTION 10. Stability and reactivity

**Reactivity** Decomposes on heating. Ammonia gas may be liberated at

high temperatures. Heating can release hazardous gases.

Decomposes at 230° C

Chemical stability Stable under normal conditions. No decomposition if used as

directed.

Possibility of hazardous

reactions

No data available.

Conditions to avoid Heat.

Materials to avoid Reducing agents. Incompatible with strong acids and bases.

Zinc Copper

Hazardous decomposition

Nitrogen oxides (NOx)ammonia

products

## SECTION 11. Toxicological information

Acute oral toxicity Ammonium Nitrate:

LD50 Rat: > 2,000 mg/kg;

Acute inhalation toxicity Ammonium Nitrate:

LC50 Rat: 4 h; dust/mist; > 88 mg/l; (literature value)

Acute dermal toxicity Ammonium Nitrate:

LD50 Rat: > 2,000 mg/kg;

**Skin irritation** Ammonium Nitrate:

Rabbit: Slightly irritating; (literature value)

**Eye irritation** Ammonium Nitrate:

Rabbit: Irritating (literature value)

## SECTION 12. Ecological information

**Toxicity to fish** Ammonium Nitrate:

semi-static test; Cyprinus carpio; 48 h; LC50; > 100 mg/l;

(literature value)

**Toxicity to daphnia and other** Ammonium Nitrate:

**aquatic invertebrates** Daphnia magna; 48 h; > 100 mg/l(literature value)



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**Toxicity to bacteria** Ammonium Nitrate:

Respiration inhibition; activated sludge of a predominantly domestic sewage; 180 min; EC50; > 1,000 mg/l; ; GLP: yes; ;

Information taken from reference works and the literature.

Chronic toxicity in aquatic Ammonium Nitrate:

invertebrates static test; Bullia digitalis; EC50; 555 mg/l; (literature value)

Mobility in soil No data available.

Results of PBT and vPvB This mixture contains no substance considered to be very

**assessment** persistent and very bioaccumulating (vPvB).

## SECTION 13. Disposal considerations

Product Dispose of as hazardous waste in compliance with local and

national regulations.

Packaging Dispose of spent product packaging responsibly and lawfully

with due consideration for health, safety and the

environment.

#### **SECTION 14. Transport information**

## **DG Pictogram**



ADR

UN number: 3218
Class: 5.1
Packaging group: III; O1;

**Proper shipping name:** NITRATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.

(Ammonium nitrate)

**RID** 

UN number: 3218



## **Ammonium Nitrate Solution**

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Class: 5.1

Packaging group: III; O1

**Proper shipping name:** NITRATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.

(Ammonium nitrate)

**ADNR** 

UN number: 3218
Class: 5.1
Packaging group: III; O1

Proper shipping name: NITRATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.

(Ammonium nitrate)

**IMDG** 

**UN number:** 3218 **Class:** 5.1

**EmS:** F-A, S-Q

Packaging group:

Proper shipping name: NITRATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.

(Ammonium nitrate)

Marine pollutant Not a Marine Pollutant

ICAO/IATA

UN number: 3218
Class: 5.1
Packaging group: III

Proper shipping name: NITRATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.

(Ammonium nitrate)

## SECTION 15. Regulatory information

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

Canada. DSL - Domestic Substances List, All chemical constituents are listed in: Canada. DSL - Domestic

part of CEPA Substances List, part of CEPA (See chapter 3)

Australia. AICS - Australian Inventory of All chemical constituents are listed in: Australia. AICS -

Chemical Substances Australian Inventory of Chemical Substances (See chapter 3)



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New Zealand Inventory of Chemical Substances	All chemical constituents are listed in: New Zealand Inventory of Chemical Substances (See chapter 3)
Japan. ENCS - Existing and New Chemical Substances Inventory	All chemical constituents are listed in: Japan. ENCS - Existing and New Chemical Substances Inventory (See chapter 3)
Japan. Industrial Safety and Health Law - Inventory	All chemical constituents are listed in: Japan. Industrial Safety and Health Law - Inventory (See chapter 3)
Korea. KECI - Korean Existing Chemicals Inventory	All chemical constituents are listed in: Korea. KECI - Korean Existing Chemicals Inventory (See chapter 3)
Philippines. PICCS - Philippines Inventory of Chemicals and Chemical Substances	All chemical constituents are listed in: Philippines. PICCS - Philippines Inventory of Chemicals and Chemical Substances (See chapter 3)
China. IECSC - Inventory of Existing Chemical Substances in China	All chemical constituents are listed in: China. IECSC - Inventory of Existing Chemical Substances in China (See chapter 3)
Taiwan. Chemical Substances Inventory (TCSI)	All chemical constituents are listed in: Taiwan. Chemical Substances Inventory (TCSI) (See chapter 3)
USA TSCA Inventory	All chemical constituents are listed in: USA TSCA Inventory (See chapter 3)

#### SECTION 16. Other information

## Full text of H-Statements

H272 May intensify fire; oxidizer.

H319 Causes serious eye irritation.

All reasonable efforts were exercised to compile this SDS in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). The SDS only provides information regarding the health, safety and environmental hazards at the date of issue, to facilitate the safe receipt, use and handling of this product in the workplace and does not replace any product information or product specifications. Since Sasol and its subsidiaries cannot anticipate or control all conditions under which this product may be handled, used and received in the workplace, it remains the obligation of each user, receiver or handler to, prior to usage, review this SDS in the context within which this product will be received, handled or used in the workplace. The user, handler



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or receiver must ensure that the necessary mitigating measures are in place with respect to health and safety. This does not substitute the need or requirement for any relevant risk assessments to be conducted. It further remains the responsibility of the receiver, handler or user to communicate such information to all relevant parties that may be involved in the receipt, use or handling of this product.

Although all reasonable efforts were exercised in the compilation of this SDS, Sasol does not expressly warrant the accuracy of, or assume any liability for incomplete information contained herein or any advice given. When this product is sold, risk passes to the purchaser in accordance with the specific terms and conditions of sale.

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