

Safety Data Sheet

AN-Emex(TM)

Version 1.00

Revision Date 11.01.2024

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

Product identifier

Trade name AN-Emex(TM)
Synonyms Heavy ANFO, Bulk blend, Emulsion ANFO Blend

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

Use Emulsion explosives for use in the mining industry

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	Explosives	Division 1.3
	Eye irritation	Category 2
	Carcinogenicity	Category 2

Label elements

REGULATION (EC) No 1272/2008

Hazard pictograms :   

Signal word : Danger



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Hazard statements : H203 Explosive; fire, blast or projection hazard.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.

Precautionary statements

Prevention
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P230 Keep wetted with water.
P234 Keep only in original container.
P240 Ground and bond container and receiving equipment.
P250 Do not subject to grinding/ shock/ friction.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.
P264 Wash the contact area thoroughly after handling.
P203 Obtain, read and follow all safety instructions before use.

Response
P370 + P372 + P380 + P373 In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P317 If eye irritation persists: Get medical advice/ attention.
P318 IF exposed or concerned, get medical advice.

Storage
P401 Store in accordance with local regulations.
P405 Store locked up.

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: ≥ 70.00 - ≤ 85.00 %W/W

CAS-No. 6484-52-2

Index-No.

EC-No. 229-347-8

Hazard statements H272 H319

Water

Contents: ≥ 10.00 - ≤ 20.00 %W/W

CAS-No. 7732-18-5

Index-No.

EC-No. 231-791-2

Hazard statements NA:



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sulphamidic acid

Contents: <= 0.20 %W/W

CAS-No. 5329-14-6

Index-No. 016-026-00-0

EC-No. 226-218-8

Hazard statements H315 H319 H412

alkenes, C10-16 alpha-

Contents: >= 2.50 - <= 4.00 %W/W

CAS-No. 68855-58-3

Index-No.

EC-No. 272-492-7

Hazard statements NA:

Fuels, diesel Gasoil

Contents: <= 3.00 %W/W

CAS-No. 68334-30-5

Index-No. 649-224-00-6

EC-No. 269-822-7

Hazard statements H351

Fuels, diesel, No 2; Gasoil - unspecified

Contents: >= 2.50 - <= 4.00 %W/W

CAS-No. 68476-34-6

Index-No. 649-227-00-2

EC-No. 270-676-1

Hazard statements H351

Sodium Nitrite

Contents: <= 0.10 %W/W

CAS-No. 7632-00-0

Index-No. 007-010-00-4

EC-No. 231-555-9

Hazard statements H301 H319 H272 H400

calcium nitrate

Contents: <= 0.10 %W/W

CAS-No. 10124-37-5

Index-No.

EC-No. 233-332-1

Hazard statements H272 H302 H318



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SECTION 4. First aid measures

Description of necessary first-aid measures

Inhalation	If breathing is irregular or stopped, administer artificial respiration. If breathing is difficult, give oxygen. Get medical attention/advice if you feel unwell.
Skin contact	Wash off immediately with soap and plenty of water. Wash contaminated clothing before reuse. Get medical attention if irritation develops and persists.
Eye contact	Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek immediate medical attention/advice.
Ingestion	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical attention immediately

Most important symptoms/effects, acute and delayed

Refer to SECTION 11

SECTION 5. Firefighting measures

Suitable extinguishing media	Do not fight fire. Evacuate personnel to safe areas.
Special hazards arising from the substance or mixture	Nitrogen oxides (NO _x) and carbon oxides are produced during combustion.
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.

SECTION 6. Accidental release measures

Personal precautions	Use personal protective equipment. Handle in accordance with good industrial hygiene and safety practice.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Try to prevent the material from entering drains or water courses.
Methods for cleaning up	Soak up with inert absorbent material. Disposal and clean up may only be done by authorised personnel. Refer to standard code of practice from supplier.
Reference to other sections	Refer to section 8 and 13

SECTION 7. Handling and storage

Safe handling advice	Wear personal protective equipment. Do not breathe vapours/dust.
Advice on protection against	No data available.



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fire and explosion

Requirements for storage areas and containers Store in a place accessible by authorized persons only.Keep container tightly closed in a dry and well-ventilated place.
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

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Respiratory protection No personal respiratory protective equipment normally required. In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection Impervious gloves

Eye protection Safety glasses

Skin and body protection Lightweight protective clothing

Hygiene measures Wash hands before breaks and immediately after handling the product.

SECTION 9. Physical and chemical properties

Information on basic physical and chemical properties

Form Emulsion with suspended solids., Emulsion with entrained gas bubbles.
State of matter Liquid; at 20 °C; 1,013 hPa
Colour Yellow to brown
Odour Characteristic oily odor.
Odour Threshold No data available.
pH No data available.
Flash point > 100 °C
Evaporation rate No data available.
Flammability (solid, gas) No data available.
Auto-ignition temperature No data available.
Decomposition Temperature No data available.
Lower explosion limit No data available.
Upper explosion limit No data available.
Vapour pressure No data available.
Relative vapour density No data available.



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Density	0.80 - 1.31 g/cm ³ ; 25 °C
Water solubility	Insoluble
Partition coefficient: n-octanol/water	No data available.
Viscosity, dynamic	> 35,000 mPa.s; 25 °C

SECTION 10. Stability and reactivity

Reactivity	Stable under normal conditions. Nitrogen oxides (NO _x) and carbon oxides are produced during combustion.
Chemical stability	No data available.
Possibility of hazardous reactions	No data available.
Conditions to avoid	Heat, flames and sparks. Keep away from combustible material.
Materials to avoid	Combustible material
Hazardous decomposition products	No data available.

SECTION 11. Toxicological information

Acute inhalation toxicity	Ammonium Nitrate: LC50 Rat: 4 h; dust/mist; > 88 mg/l; (literature value)
Skin irritation	Ammonium Nitrate: Rabbit: Slightly irritating; (literature value)
Eye irritation	Ammonium Nitrate: Rabbit: Irritating (literature value)
Sensitisation	No data available.
Repeated dose toxicity	No data available.
Carcinogenicity	Suspected of causing cancer.

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 aquatic invertebrates	Ammonium Nitrate: Daphnia magna; 48 h; > 100 mg/l(literature value)
Toxicity to algae	No data available.
Toxicity to bacteria	No data available.
Toxicity to fish	No data available.
Biodegradability	No data available.
Physico-chemical removability	No data available.
Bioaccumulation	No data available.

SECTION 13. Disposal considerations

Product	Dispose of as special waste in compliance to local, national and international regulations. Refer to standard code of practice from supplier.
Packaging	Dispose of spent product packaging responsibly and lawfully with due consideration for health, safety and the environment.

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SECTION 14. Transport information

Marine pollutant	Not a Marine Pollutant
Further Information	Forbidden for transport on any public roads and outside mine premises

SECTION 15. Regulatory information

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

Registration, Evaluation and Authorisation of Chemicals (REACH)	All chemical constituents are listed in: Registration, Evaluation and Authorisation of Chemicals (REACH) (See chapter 3)
Inv. of Exist. Chem. Substances in China	All chemical constituents are listed in: Inv. of Exist. Chem. Substances in China (See chapter 3)
USA TSCA Inventory	All chemical constituents are listed in: USA TSCA Inventory (See chapter 3)
Canadian Domestic Substances List (DSL)	All chemical constituents are listed in: Canadian Domestic Substances List (DSL) (See chapter 3)
Australian Inv. of Chem. Substances (AICS)	All chemical constituents are listed in: Australian Inv. of Chem. Substances (AICS) (See chapter 3)
New Zealand Inventory of Chemicals (NZIoC)	All chemical constituents are listed in: New Zealand Inventory of Chemicals (NZIoC) (See chapter 3)
Jap. Inv. of Exist. & New Chemicals (ENCS)	All chemical constituents are listed in: Jap. Inv. of Exist. & New Chemicals (ENCS) (See chapter 3)
Japan. Industrial Safety & Health Law (ISHL)	All chemical constituents are listed in: Japan. Industrial Safety & Health Law (ISHL) (See chapter 3)
Korea. Existing Chemicals Inventory (KECI)	All chemical constituents are listed in: Korea. Existing Chemicals Inventory (KECI) (See chapter 3)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	All chemical constituents are listed in: Philippines Inventory of Chemicals and Chemical Substances (PICCS) (See chapter 3)
China Inv. Existing Chemical Substances (IECSC)	All chemical constituents are listed in: China Inv. Existing Chemical Substances (IECSC) (See chapter 3)

SECTION 16. Other information

Full text of H-Statements



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- H272 May intensify fire; oxidizer.
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H351 Suspected of causing cancer.
- H400 Very toxic to aquatic life.
- H412 Harmful to aquatic life with long lasting effects.

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 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.

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