



# Safety Data Sheet

## Expanfo(TM)

Version 1.00

Revision Date 12.12.2023

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

#### Product identifier

**Trade name** Expanfo(TM)  
**Synonyms** Expanfo™100, Expanfo™200, Expanfo™300, ANFO

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

**Use** Explosives

#### 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

<b>Classification</b>	Explosives	Division 1.1
	Eye irritation	Category 2
	Specific target organ toxicity - single exposure	Category 3
	Specific target organ toxicity - repeated exposure	Category 2
	Long-term (chronic) aquatic hazard	Category 2

#### Label elements


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

## Safety Data Sheet

### Expanfo(TM)

Version 1.00

Revision Date 12.12.2023

<b>Hazard pictograms</b>	:	
<b>Signal word</b>	:	Danger
<b>Hazard statements</b>	:	<p>H201 Explosive; mass explosion hazard.</p> <p>H319 Causes serious eye irritation.</p> <p>H336 May cause drowsiness or dizziness.</p> <p>H373 May cause damage to organs through prolonged or repeated exposure.</p> <p>H411 Toxic to aquatic life with long lasting effects.</p>
<b>Precautionary statements</b>		
<b>Prevention</b>		<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P234 Keep only in original packaging.</p> <p>P240 Ground and bond container and receiving equipment.</p> <p>P250 Do not subject to grinding/ shock/ friction.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P264 Wash the contact area thoroughly after handling.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P260 Do not breathe dust.</p> <p>P273 Avoid release to the environment.</p>
<b>Response</b>		<p>P370 + P372 + P380 + P373 In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.</p> <p>P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P337 + P317 If eye irritation persists: Get medical advice/ attention.</p> <p>P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.</p> <p>P319 Get medical help if you feel unwell.</p> <p>P391 Collect spillage.</p>
<b>Storage</b>		<p>P401 Store in accordance with the particular national regulations.</p> <p>P403 + P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P405 Store locked up.</p>
<b>Disposal</b>		<p>P503 Refer to manufacturer/ supplier/ for information on disposal/ recovery/ recycling.</p>
<b>Other hazards</b>		None known.



# Safety Data Sheet

## Expanfo(TM)

Version 1.00

Revision Date 12.12.2023

### SECTION 3. Composition/information on ingredients

#### HAZARDOUS INGREDIENTS

##### Ammonium Nitrate

**Contents:**  $\geq 93.00$  -  $\leq 95.00$  %W/W

**CAS-No.** 6484-52-2

**Index-No.**

**EC-No.** 229-347-8

**Hazard statements** H272 H319

##### Kerosine (Fischer-Tropsch), C7-16 with alkylarom.

**Contents:**  $\leq 7.00$  %W/W

**CAS-No.** 2243403-81-6

**Index-No.**

**EC-No.**

**Hazard statements** H226 H304 H336 H372 H411

##### Heptane; n-Heptane

**Contents:**  $\geq 1.00$  -  $< 2.50$  %W/W

**CAS-No.** 142-82-5

**Index-No.** 601-008-00-2

**EC-No.** 205-563-8

**Hazard statements** H225 H315 H304 H336 H410 H400

##### n-Octane

**Contents:**  $\geq 1.00$  -  $< 2.50$  %W/W

**CAS-No.** 111-65-9

**Index-No.** 601-009-00-8

**EC-No.** 203-892-1

**Hazard statements** H225 H304 H315 H336 H410

##### methylcyclohexane

**Contents:**  $\geq 1.00$  -  $< 2.50$  %W/W

**CAS-No.** 108-87-2

**Index-No.** 601-018-00-7

**EC-No.** 203-624-3

**Hazard statements** H225 H315 H304 H336 H411

## Safety Data Sheet

### Expanfo(TM)

Version 1.00

Revision Date 12.12.2023

#### SECTION 4. First aid measures

##### Description of necessary first-aid measures

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

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

Refer to SECTION 11

#### SECTION 5. Firefighting measures

<b>Suitable extinguishing media</b>	Do not fight fire. Evacuate personnel to safe areas.
<b>Special hazards arising from the substance or mixture</b>	Do not fight fire. Evacuate area immediately. Nitrogen oxides (NOx) and carbon oxides are produced during combustion. Risk of explosion by shock, friction, fire or other sources of ignition.
<b>Special protective equipment for firefighters</b>	When controlling fires before involvement of explosives, wear self-contained breathing apparatus and protective suit. When fire reaches material, evacuate and let it burn to completion.

#### SECTION 6. Accidental release measures

<b>Personal precautions</b>	Use personal protective equipment. Handle in accordance with good industrial hygiene and safety practice.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Try to prevent the material from entering drains or water courses.
<b>Methods for cleaning up</b>	Disposal and clean up may only be done by authorised personnel. Recommendation: Contact the supplier for information for assistance before clean up and disposal is attempted. Refer to standard code of practice from supplier.
<b>Reference to other sections</b>	Refer to section 8 and 13

#### SECTION 7. Handling and storage



# Safety Data Sheet

## Expanfo(TM)

Version 1.00

Revision Date 12.12.2023

**Safe handling advice** Wear personal protective equipment. Avoid contact with skin and eyes. Ensure adequate ventilation. Keep away from flames and sparks. Minimize handling and mechanical stressing of product. In case of dust generation during handling, wear dust respiratory protection.

**Advice on protection against fire and explosion** No data available.

**Requirements for storage areas and containers** Store in a segregated, approved and labeled area. Keep separate from detonators and incendiary devices. Keep in a cool, well-ventilated place. Keep away from direct sunlight. See South African Explosives Act 26 of 1956.

**Advice on common storage** No data available.

### SECTION 8. Exposure controls/personal protection

#### Components with workplace control parameters

#### NATIONAL OCCUPATIONAL EXPOSURE LIMITS

Components	Type	Control parameters	Update	Basis
N-HEPTANE	TWA	1,600 mg/m <sup>3</sup>	1995	South Africa RELs
N-HEPTANE	TWA	400 ppm	1995	South Africa RELs
	STEL	2,000 mg/m <sup>3</sup>	1995	South Africa RELs
	STEL	500 ppm	1995	South Africa RELs
N-OCTANE	TWA	1,450 mg/m <sup>3</sup>	1995	South Africa RELs
N-OCTANE	TWA	300 ppm	1995	South Africa RELs
	STEL	1,800 mg/m <sup>3</sup>	1995	South Africa RELs
	STEL	375 ppm	1995	South Africa RELs

#### Exposure controls

##### Engineering measures

Use electrically conductive or static dissipative equipment. Minimize handling and mechanical stressing of product.

##### Personal protective equipment

**Respiratory protection** In case of dust generation during handling, wear dust respiratory protection.

**Hand protection** Gloves suitable for permanent contact:  
 Material: natural rubber/natural latex, polychloroprene, butyl-rubber, Polyvinylchloride  
 Break through time: 8 h  
 Material thickness: 0.5 mm  
 Gloves suitable for permanent contact:  
 Material: fluoro carbon rubber - FKM  
 Break through time: 8 h

## Safety Data Sheet

### Expanfo(TM)

Version 1.00

Revision Date 12.12.2023

	Material thickness: 0.4 mm
	Gloves suitable for permanent contact.:
	Material: nitrile rubber/nitrile latex
	Break through time: 8 h
	Material thickness: 0.35 mm
	Unsuitable gloves
	Material: leather
<b>Eye protection</b>	Safety goggles
<b>Skin and body protection</b>	Lightweight protective clothing
<b>Hygiene measures</b>	Wash hands before breaks and immediately after handling the product.

#### SECTION 9. Physical and chemical properties

##### Information on basic physical and chemical properties

<b>Form</b>	Solid and impregnated with oil.
<b>State of matter</b>	Solid
<b>Colour</b>	White to grey
<b>Odour</b>	Characteristic oily odor.
<b>Odour Threshold</b>	No data available.
<b>pH</b>	4.5 - 6.0
<b>Melting point/range</b>	170 °C
<b>Flash point</b>	No data available.
<b>Evaporation rate</b>	No data available.
<b>Flammability (solid, gas)</b>	No data available.
<b>Auto-ignition temperature</b>	No data available.
<b>Lower explosion limit</b>	No data available.
<b>Upper explosion limit</b>	No data available.
<b>Vapour pressure</b>	No data available.
<b>Relative vapour density</b>	No data available.
<b>Density</b>	0.60 - 0.85 g/cm <sup>3</sup> ; 25 °C
<b>Water solubility</b>	93 - 95 g/l 25 °C
<b>Partition coefficient: n-octanol/water</b>	No data available.
<b>Viscosity, kinematic</b>	No data available.

#### SECTION 10. Stability and reactivity

<b>Reactivity</b>	No data available.
<b>Chemical stability</b>	No data available.
<b>Possibility of hazardous reactions</b>	No data available.
<b>Conditions to avoid</b>	Heat, flames and sparks. Keep away from combustible material.
<b>Materials to avoid</b>	Reducing agents. Acids. Alkali metals. Organic materials Flammable materials Chlorates. Corrosive substances, sulphur, finely divided metals, charcoal, cork and sawdust. Nitric acid
<b>Hazardous decomposition products</b>	Carbon oxides. Nitrous oxide.

#### SECTION 11. Toxicological information

# Safety Data Sheet

## Expanfo(TM)

Version 1.00

Revision Date 12.12.2023

<b>Acute inhalation toxicity</b>	No data available.
<b>Skin irritation</b>	No data available.
<b>Eye irritation</b>	Causes serious eye irritation.
<b>Sensitisation</b>	No data available.
<b>Repeated dose toxicity</b>	May cause damage to organs through prolonged or repeated exposure.
<b>Carcinogenicity</b>	No data available.

### SECTION 12. Ecological information

<b>Mobility in soil</b>	No data available.
<b>Results of PBT and vPvB assessment</b>	This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).
<b>Other adverse effects</b>	Toxic to aquatic life with long lasting effects.

### SECTION 13. Disposal considerations

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

### SECTION 14. Transport information

#### DG Pictogram



<b>ADR</b>	
<b>UN number:</b>	0082
<b>Class:</b>	1.1 D;
<b>Proper shipping name:</b>	EXPLOSIVE, BLASTING, TYPE B
<b>RID</b>	
<b>UN number:</b>	0082
<b>Class:</b>	1.1 D
<b>Proper shipping name:</b>	EXPLOSIVE, BLASTING, TYPE B
<b>ADNR</b>	
<b>UN number:</b>	0082
<b>Class:</b>	1.1 D
<b>Proper shipping name:</b>	EXPLOSIVE, BLASTING, TYPE B



## Safety Data Sheet

### Expanfo(TM)

Version 1.00

Revision Date 12.12.2023

#### IMDG

**UN number:** 0082  
**Class:** 1.1  
**EmS:** F-B, S-Y  
D;  
**Proper shipping name:** EXPLOSIVE, BLASTING, TYPE B  
**Marine pollutant** Marine pollutant  
**ICAO/IATA**  
**UN number :** 0082  
**Class:** 1.1  
**Proper shipping name:** EXPLOSIVE, BLASTING, TYPE B

#### SECTION 15. Regulatory information

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

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

#### SECTION 16. Other information

##### Full text of H-Statements

H225 Highly flammable liquid and vapour.  
H226 Flammable liquid and vapour.  
H272 May intensify fire; oxidizer.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.





## Safety Data Sheet

### Expanfo(TM)

Version 1.00

Revision Date 12.12.2023

- H336 May cause drowsiness or dizziness.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic 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. 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.