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| DOCUMENT NO: <b>SDS.BME-7</b> | ISSUE DATE: <b>12-08-2026</b> | REVISE DATE: <b>12-08-2028</b> | REVISION: <b>13</b> | PAGE NO: <b>1 of 5</b> |
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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
|  | Document Type:                                                                                                       |
|                                                                                   | <h1 style="text-align: center;">Safety Data Sheet</h1> <p style="text-align: center;">Conforms to ISO 11014:2009</p> |
|                                                                                   | Title:                                                                                                               |
|                                                                                   | <h2>INNOFEX®</h2>                                                                                                    |

## 1. Identification of the product and Company Identification

|                                   |                                                                                   |                                                                                                                                                                                                |
|-----------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Name</b>               | INNOFEX®                                                                          | <b>Manufactured/ supplied by</b>                                                                                                                                                               |
| <b>Product use</b>                | Underground and surface blasting operations                                       | <b>BME</b>                                                                                                                                                                                     |
| <b>Synonyms</b>                   | ANFO                                                                              | A division of Omnia Group (Pty) Ltd                                                                                                                                                            |
| <b>Chemical Formula</b>           | Not applicable                                                                    | <i>Physical address</i>                                                                                                                                                                        |
| <b>Emergency telephone number</b> | <b>(+27) 11 706-3398</b>                                                          | Omnia Holdings, Building H<br>Monte Circle Business Park<br>178 Montecasino Boulevard<br>Fourways<br>Sandton, 2191                                                                             |
| <b>QR code</b>                    |  | <i>Postal address</i><br>P.O. Box 70040<br>Bryanston, 2021<br>Gauteng, South Africa<br><br><i>Contact</i><br>Tel: +27 11 7098888<br>E-mail: <a href="mailto:info@bme.co.za">info@bme.co.za</a> |

## 2. Hazards identification

This substance is classified as dangerous according to Directive 1999/45/EC and its amendments.

### GHS Classification:



Exp. 1.1 H201 Explosive; mass explosion hazard.



Skin Irrit. 2: H315 Causes skin irritation.  
Eye Irritation 2A: H319 Causes serious eye irritation  
Acute Tox. 5: H303 May be harmful if swallowed.  
Acute Tox. 5: H333 May be harmful if inhaled.

### GHS precautionary Statements:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Keep wetted.  
Do not subject to grinding/shock/friction.  
Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Store in accordance with local/regional/national/international regulations.

### Additional hazards: Effects and symptoms Aggravating conditions

None identified  
Hazardous in case of skin contact (irritant), in case of eye contact (irritant) of inhalation  
Repeated or continues exposure to any toxic substance may produce general deterioration of health by accumulation in human organs.

See toxicological information (section 11)

### 3. Composition/information on ingredients

#### Substance/preparation: Preparation

|                                          |                            |                  |                               |                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------|----------------------------|------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Chemical name</b><br>Ammonium Nitrate | <b>CAS No</b><br>6484-52-2 | <b>%</b><br>> 90 | <b>EC Number</b><br>229-347-8 | <b>GHS Classification</b><br> Ox. Liq. 2 H272<br> Skin Irrit. 2, H315<br>Eye Irritation 2A, H319<br>Acute Tox. 5, H303<br>Acute Tox. 5, H333 |
| Fuel additive                            |                            | < 10             |                               |  Flam. Liq. 3, H226                                                                                                                                                                                                             |

### 4. First aid measures

|                                   |                                                                                                                                                                                                                                                                                                             |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>                 | : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention. No additional remarks.                                                                                                                                                                             |
| <b>Ingestion</b>                  | : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear                                                                     |
| <b>Skin contact</b>               | : In case of skin contact - immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention. |
| <b>Eye contact</b>                | : Check for and remove any contact lenses. In case of contact immediately flush eyes with plenty of water for at least 20 minutes. Cold water may be used. Get medical attention.                                                                                                                           |
| <b>Note to physician</b>          | : No specific treatment, treat symptomatically.                                                                                                                                                                                                                                                             |
| <b>Protection of first aiders</b> | : No additional remarks.                                                                                                                                                                                                                                                                                    |

### 5. Fire-fighting measures

|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Extinguishing media</b>                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Suitable</b>                                 | : DO NOT fight fire when it reaches material.                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Not suitable</b>                             | : No additional remarks.                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Unusual fire/explosion hazards</b>           | : Explodes when heated.                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Hazardous thermal decomposition products</b> | : Hazardous gases will result from fire or detonation (nitrogen oxides and carbon oxide).                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Special fire fighting procedures</b>         | : When fighting fire before explosives are involved, fire fighters should wear positive pressure self contained breathing apparatus (SCBA) and full turnout gear. Fire fighters' protective clothing will provide limited protection. DO NOT ATTEMPT TO FIGHT FIRE WHEN IT REACHES EXPLOSIVES. Fire should be allowed to burn out – withdraw all personnel from the vicinity of the incident (out of line of sight and away from windows or glass panels). |
| <b>Protection of fire fighters</b>              | : Use an approved/certified respirator or equipment.                                                                                                                                                                                                                                                                                                                                                                                                       |

### 6. Accidental release measures

|                                  |                                                                                               |
|----------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Personal precautions</b>      | : Do not touch spilled material or damaged vessels or containers. Evacuate surrounding areas. |
| <b>Environmental precautions</b> | : Dispose waste using a professional registered waste disposal company.                       |

**Note:** See section 8 for personal protective equipment and section 13 for waste disposal.

### 7. Handling and storage

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Handling</b>            | : Keep locked away. Do not expose to sources of ignition, such as electrostatic discharge. Avoid contact with incompatible materials such as reducing agents and combustible materials. Suitable protective clothing should be worn. Avoid contact with skin and eyes and do not ingest and avoid inhaling dust. In case of ingestion seek medical advice. Wear suitable respiratory equipment in case of insufficient ventilation. |
| <b>Storage</b>             | : Storage must be in accordance with relevant explosive legislation. Keep separate from all organic materials, chemical sulphur, flammable liquids, chlorates, permanganates, finely divided metals, charcoals, coke, cork or sawdust.                                                                                                                                                                                              |
| <b>Packaging materials</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Recommended use:</b>    | : Store in original packaging.                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Not suitable</b>        | : No additional remarks.                                                                                                                                                                                                                                                                                                                                                                                                            |

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## 8. Exposure controls/personal protection

|                             |                                                                                                                        |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>Engineering measures</b> | : Ensure sufficient ventilation, to remove dust and fumes and avoid electrostatic discharge.                           |
| <b>Hygiene measures</b>     | : Wash hands after handling compounds and before eating, smoking, using ablution facilities and at the end of the day. |

### Occupational exposure limits:

| Ingredient name                          | Occupational exposure limits                    |
|------------------------------------------|-------------------------------------------------|
| No additional information                | No additional information                       |
| <b>Recommended monitoring procedures</b> | : No additional information.                    |
| <b>Personal protective equipment</b>     |                                                 |
| <b>Respiratory system</b>                | : Approved or certified dust respirator.        |
| <b>Skin and body</b>                     | : Overalls recommended.                         |
| <b>Hands</b>                             | : Gloves                                        |
| <b>Eyes</b>                              | : Safety glasses with side shields recommended. |

## 9. Physical and chemical properties

|                                                       |                                                                             |
|-------------------------------------------------------|-----------------------------------------------------------------------------|
| <b>Physical state</b>                                 | : Free flowing 2 to 3 mm diameter spherical granules                        |
| <b>Colour</b>                                         | : White / of white / pink / reddish-grey colour                             |
| <b>Odour</b>                                          | : Slight smell of hydrocarbon fuel                                          |
| <b>Odour threshold</b>                                | : Not available                                                             |
| <b>Boiling point</b>                                  | : Decomposition temperature approximately 240 °C                            |
| <b>Melting point</b>                                  | : Approximately 170 °C                                                      |
| <b>Flash point</b>                                    | : Not applicable                                                            |
| <b>Flammability</b>                                   | : Non-Flammable                                                             |
| <b>Density</b>                                        | : 0.85 – 1.08 g/ml                                                          |
| <b>Vapor Density</b>                                  | : Not available                                                             |
| <b>Vapour pressure</b>                                | : Not available                                                             |
| <b>Evaporation rate</b>                               | : Not available                                                             |
| <b>Solubility - Water</b>                             | : Completely soluble                                                        |
| <b>Solubility – Solvent</b>                           | : Water                                                                     |
| <b>Solubility - Coefficient</b>                       | : Not available                                                             |
| <b>pH</b>                                             | : Not available                                                             |
| <b>Explosives properties</b>                          | : Explosive in presence of open flame, sparks or static discharge and heat. |
| <b>Fire hazards in presence of various substances</b> | : Not applicable                                                            |
| <b>Auto-ignition temperature</b>                      | : Not available (May explode at temperatures > 100 degrees C)               |
| <b>Viscosity</b>                                      | : Not available                                                             |
| <b>Neurotoxicity</b>                                  | : Not available                                                             |

## 10. Stability and reactivity

|                                        |                                                                                                                                                                                                 |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Stability</b>                       | : The product is stable. As a standalone product, Innofex® may be used in ground temperatures up to 65°C. It may not be used in reactive ground or hot holes.                                   |
| <b>Conditions to avoid</b>             | : <b>IMPACT, HIGH TEMPERATURE, SPARKS AND SOURCES OF IGNITION MAY CAUSE EXPLOSION. May react with reducers and combustible materials</b>                                                        |
| <b>Hazardous decomposition product</b> | : Hazardous gases will result from fire or detonation (nitrogen oxides and carbon oxide).                                                                                                       |
| <b>Hazardous polymerisation</b>        | : Will not occur                                                                                                                                                                                |
| <b>Incompatible materials</b>          | : Keep separate from all organic materials, chemical sulphur, flammable liquids, chlorates, permanganates, finely divided metals, charcoals, detonators and all aerosols, coke, cork or sawdust |

## 11. Toxicological information

|                             |                                                                    |
|-----------------------------|--------------------------------------------------------------------|
| <b>Eyes</b>                 | : Hazardous in case of contact with eyes – irritant                |
| <b>Skin</b>                 | : Hazardous in case of contact with skin – irritant                |
| <b>Inhalation</b>           | : Inhalation of dusts will produce irritation to respiratory track |
| <b>Ingestion</b>            | : Ingestion will produce irritation to gastro-intestinal tract     |
| <b>Target organs</b>        | : Blood                                                            |
| <b>Acute toxicity</b>       | : None known                                                       |
| <b>Carcinogenic</b>         | : None known                                                       |
| <b>Mutagenicity</b>         | : None known                                                       |
| <b>Reproductive hazards</b> | : None known                                                       |

## 12. Ecological information

**Mobility** : No data available  
**Soil/water partition coefficient** : No data available  
**Persistence/degradability** : Biodegradable  
**Bio accumulative potential** : Not expected

## 13. Disposal considerations

**Methods of disposal** : Disposal should be in accordance with the current applicable explosive legislation. Do not flush into natural water systems.  
 Packaging must be disposed of by burning, as per applicable explosive regulations  
**Waste classification** : Hazardous chemical waste

## 14. Transport information

| Regulatory information | UN Number | Name and description        | Class | Additional information                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------|-----------|-----------------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ADR/RID Class          | 0082      | EXPLOSIVE, BLASTING, TYPE B | 1.1D  | Limited quantity<br>LQ0<br><br>CEFIC Tremcard                                                                                                                                                                                                                                                                                                                                                                  |
| ADN Class              | 0082      | EXPLOSIVE, BLASTING, TYPE B | 1.1D  |                                                                                                                                                                                                                                                                                                                                                                                                                |
| IMDG Class             | 0082      | EXPLOSIVE, BLASTING, TYPE B | 1.1D  | <b>Emergency schedules (EMS)</b><br><b>F-B, S-X</b><br><br><b>Remarks</b><br><b>Packaging instructions: P131</b>                                                                                                                                                                                                                                                                                               |
| IATA-DGR Class         | 0082      | EXPLOSIVE, BLASTING, TYPE B | 1.1D  | <b>AIR:</b> Product may not be transported by Air.<br><b>RAIL:</b><br>Applicable Hazchem and specific requirements of the relevant transport authority.<br>Both <b>Rail</b> and <b>Road</b> must comply with: Hazardous Substance Act No 15 of 1973 and the OHSAct specifically the Regulations for Hazardous Chemical Substances<br><b>SEA:</b> As per UN recommendation and the International Maritime Code. |

## 15. Regulatory Information

**EU Regulation**  
**Hazard symbols** :  
**Indicator of Danger:**  
**Risk phrases** : R2 – Risk of explosion by shock, friction, fire or other source of ignition  
 : R40 – Limited evidence of a carcinogenic effect  
 : R8 - Contact with combustible material may cause fire  
 : R22 – Harmful if swallowed  
**Safety phrases** : R36/38 - Irritating to eyes and skin  
 : S34 – Avoid shock and friction  
 : S16 – Keep away from sources of ignition  
 : S24/25 – Avoid contact with skin and eyes  
**Product use** : Classification and labeling have been performed according to EU directives 67/548/EEC, 1999/45/EC including amendments and the intended use.

## 16. Other information

|                                 |        |                                                                                                 |
|---------------------------------|--------|-------------------------------------------------------------------------------------------------|
| Full text of R-Phrases with no: | R2     | Risk of explosion by shock, friction, fire or another source of ignition                        |
|                                 | R3     | Extreme risk of explosion by shock, friction, fire or other sources of ignition                 |
|                                 | R5     | Heating may cause an explosion                                                                  |
|                                 | R8     | Contact with combustible material may cause fire                                                |
|                                 | R9     | Explosive when mixed with combustible material                                                  |
|                                 | R10    | Flammable                                                                                       |
|                                 | S15    | Keep away from heat                                                                             |
|                                 | S17    | Keep away from combustibles                                                                     |
|                                 | R61    | May cause harm to the unborn child                                                              |
|                                 | R62    | Possible risk of impaired fertility                                                             |
|                                 | R20/22 | Harmful by inhalation and if swallowed                                                          |
|                                 | R22    | Harmful if swallowed                                                                            |
|                                 | R36/38 | Irritating to eyes and skin                                                                     |
|                                 | R33    | Danger of cumulative effects                                                                    |
|                                 | R40    | Limited evidence of carcinogenic effect                                                         |
|                                 | R50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |

### History

|                        |   |                                             |
|------------------------|---|---------------------------------------------|
| Date of printing       | : | 12-08-2026                                  |
| Date of issue          | : | 12-08-2026                                  |
| Date of previous issue | : | 12-08-2024                                  |
| Recommended by         | : | Kady Govender – R&D Laboratory Supervisor   |
| Authorised by          | : | Myra Coetzer- Acting R&D Laboratory Manager |

### Remarks:

This SDS summarizes, at the date of issue, our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle the product in the workplace. As **BME** cannot control the use and handling of the product, each user must review the SDS in the context of how the user intends to handle and use the product in the workplace.