Document Type:

Safety Data Sheet

Conforms to ISO 11014:2009

Title:

INNOPAK™

1. Identification of the product and Company Identification

Product Name	INNOPAK™	**Manufactured/ supplied by**
Product use	Cartridge sensitized emulsion	**BME** A division of Omnia Group (Pty) Ltd *Physical address* Omnia Holdings, Building H Monte Circle Business Park 178 Montecasino Boulevard Fourways Sandton, 2191 *Postal address* P.O. Box 70040 Bryanston, 2021 Gauteng, South Africa *Contact* Tel: +27 11 7098888 E-mail: info@bme.co.za
Synonyms	INNOPAK Plus™, INNOPAK Super™, INNOPAK Super Plus™	
Chemical Formula	Not applicable	
Emergency telephone number	**(+27) 11 706 3398**	
QR code		

2. Hazards identification

This substance is classified as dangerous according to Directive 67/548/EEC 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.
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: **Risk of explosion by shock, friction, fire or other sources of ignition. Keep away from ignition sources – No smoking**.

Effects and symptoms: Hazardous in case of skin contact (irritant), eye contact (irritant), and inhalation. Slightly hazardous in case of ingestion.

Aggravating conditions: 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:

Chemical name	CAS No	%	EC Number	GHS Classification
Ammonium Nitrate	6484-52-2	> 60	229-347-8	Ox. Liq. 2 H272 Skin Irrit. 2, H315 Eye Irritation 2A, H319 Acute Tox. 5, H303 Acute Tox. 5, H333
Sodium Nitrate	7631-99-4	>10		Ox. Sol. 2 H272 Eye Irritation 2A, H319 Acute Tox. 5, H303
Aluminum	7429-90-5	<10	231-072-3	Pyr. Sol. 1, H250 Water-react. 2, H261

The balance of the mass of explosives product consists of water, inert plastics and metals

***Occupational exposure limit(s) if available, are listed in section 8**

4. First aid measures

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

Ingestion : 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.

Skin contact : 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.

Eye contact : 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.

Note to physician : No specific treatment, treat symptomatically.

Protection of first aiders : No additional remarks.

5. Fire-fighting measures

Extinguishing media

Suitable : **DO NOT fight fire when it reaches material**

Not suitable : No additional remarks.

Unusual fire/explosion hazards : Hazardous gases will result from fire or detonation (nitrogen oxides and carbon oxide).

Special firefighting procedures : 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).

Protection of fire fighters : Use an approved/certified respirator or equipment. Avoid all ignition sources.

6. Accidental release measures

Personal precautions : Do not touch spilled material or damaged vessels or containers. Evacuate surrounding areas. Clear area of all unprotected personnel.

Environmental precautions : 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

Handling	:	Handle with care. Do not subject the material to impact, friction and ignition sources. 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. In case of ingestion seek medical advice. Wear suitable respiratory equipment in case of insufficient ventilation.
Storage	:	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.
Packaging materials		
Recommended use:	:	Store in original packaging
Not suitable	:	No additional remarks.

8. Exposure controls/personal protection

Engineering measures	:	Ensure sufficient ventilation, to remove dust and fumes and avoid electrostatic discharge
Hygiene measures	:	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

Recommended monitoring procedures	:	No additional information
Personal protective equipment		
Respiratory system	:	None
Skin and body	:	Overalls & safety shoes
Hands	:	Gloves
Eyes	:	Eye protection

9. Physical and chemical properties

Physical state	:	Enclosed plastic elongated cartridge with clipped ends, containing emulsion.
Colour	:	Cream colour – gray colour if product contains aluminium.
Odour	:	Hydrocarbon (slight)
Odour threshold	:	Not available
Boiling point	:	No data available
Melting point	:	Not applicable
Flash point	:	Not available
Flammability	:	Only flammable in contact with other combustibles
Density	:	1 – 1.2 g/ml
Vapour Density	:	Not available
Vapour pressure	:	Not available
Evaporation rate	:	Not available
Solubility - Water	:	Insoluble
Solubility – Solvent	:	Partially soluble in light hydrocarbon fuels
Solubility - Coefficient	:	Not available
pH	:	Not applicable
Fire hazards in presence of various substances	:	Contact with combustible material may cause fire
Auto-ignition temperature	:	Not available
Explosive properties	:	Explosive in presence of open flame, sparks or static discharge and heat.
Viscosity	:	Not available
Neurotoxicity	:	Not available

10. Stability and reactivity

Stability	:	The product is stable. Avoid ignition sources, static electricity discharge and friction. Avoid contact with other chemicals.
Conditions to avoid	:	**IMPACT, HIGH TEMPERATURE, SPARKS AND SOURCES OF IGNITION MAY CAUSE EXPLOSION. May react with reducers and combustible materials**
Hazardous decomposition product	:	Hazardous gases will result from fire or detonation (nitrogen oxides and carbon oxide).
Hazardous polymerisation	:	Will not occur

11. Toxicological information

Eyes	:	Hazardous in case of contact with eyes – irritant
Skin	:	Hazardous in case of contact with skin – irritant
Inhalation	:	Hazardous in case of inhalation – irritant
Ingestion	:	Ingestion will produce irritation to gastro-intestinal tract
Target organs	:	Blood, respiratory tract, skin, eyes
Acute toxicity	:	None known
Carcinogenic	:	None known
Mutagenicity	:	None known
Reproductive hazards	:	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
Destruction	:	The preferred method of destruction of emulsion explosives is by burning in a licensed facility. It is strongly recommended to contact the supplier for destruction arrangements, at the supplier's licensed facilities. Should the user have access to a licensed burning facility, the supplier should be contacted for approved procedures for destruction via burning.

14. Transport information

Regulatory information	UN Number	Name and description	Class	Additional information
ADR/RID Class	0241	EXPLOSIVE BLASTING	1.1D	**Limited quantity** LQ0 **CEFIC Tremcard**
ADN Class	0241	EXPLOSIVE BLASTING	1.1D	
IMDG Class	0241	EXPLOSIVE BLASTING	1.1D	**Emergency schedules (EMS)** **F-B, S-X** **Remarks** **Packaging instructions: P131**
IATA-DGR Class	0241	EXPLOSIVE BLASTING	1.1D	**AIR:** Product may not be transported by Air **RAIL:** Applicable Hazchem and specific requirements of the relevant transport authority. Both **Rail** and **Road** must comply with: Hazardous Substance Act No 15 of 1973 and the OHSAct specifically the Regulations for Hazardous Chemical Substances **SEA:** 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, fire or other sources of ignition
	:	R8 - Contact with combustible material may cause fire
	:	R36/38 - Irritating to eyes and skin
Safety phrases	:	S16 – Keep away from sources of ignition
	:	S34 – Avoid shock and friction
	:	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
	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
	R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

History

Date of printing	:	15-08-2024
Date of issue	:	15-08-2024
Date of previous issue	:	15-08-2022
Recommended by	:	Kady.Govender – R&D Laboratory Supervisor
Authorized 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.