Material Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name : POWERGEL MAGNUM, 365, TRIMEX
Synonyms :
CAS-No. :
Molecular Formula :
Supplier : Orica-Nitro Explosives Manufacturing Co.
ACN
Street Address : Hülya Sokak No: 45
06700 G.O.P. - Ankara
TURKEY
Telephone : +90312 4461600 Pbx
Facsimile : +90312 4461555

2. COMPOSITION / INFORMATION ON INGREDIENTS

Recommended use: Mining, quarrying and general blasting work where an energetic water-resistant explosive is required.

Appearance : Grey to cream mixture containing white prills cartridges into plastic 'sausages' with metal elips at both ends. Mild odour.

CHEMICAL	CAS.NO	PROPORTION
Ammonium nitrate	6484-52-2	VHIGH
Inert materials	-	LOW
Inorganic oxidisers	-	LOW
Cellulose, starch, oils & other oxygen negative materials	-	LOW
Stabilisers	-	LOW
Metal powder	-	--------
	I	--------
	I	100%

PROPORTION (% weight per weight):
VHIGH >60, HIGH 30-60, MED 10-29, LOW 1-9, VLOW

3. HAZARDS IDENTIFICATION

Not classified as hazardous according to criteria of Work safe Turkey.
Classified as Dangerous Goods for the purpose of transport by road or rail. Refer to relevant regulations for storage and transport requirements.

Literary reference

Class 1.1 D Explosive
Poisons Schedule /Toxic Substance (NZ): N/A - Not Applicable

4. FIRST AID MEASURES

Ingestion: Rinse mouth with water. Give plenty of water to drink. Seek medical advice.

Eye contact: Irrigate with copious quantities of water for 15 minutes. in all cases of eye contamination it is a sensible precaution to seek medical advice.

Skin contact: Where possible wipe material from skin then wash contaminated skin with plenty of soap and water. Remove contaminated clothing and wash before re-use. If irritation occurs seek medical advice.

Inhalation: Remove victim from exposure - avoid becoming a casualty. Seek medical advice if effects persist.

Notes to physician: Treat symptomatically and as for exposure to nitrates. Över exposure may lead to methaemoglobinaemia. Nitrates can have a smooth muscle relaxant effect Which can result in hypo tension.

5. FIRE-FIGHTING MEASURES

Specific hazards: Explosive material. Avoid ali ignition sources.

Fire fighting further advice: Explosive. in case of a small fire, if actual explosive is not burning, carefully remove as much explosive as possible to a safe distance. However, if explosive burning, evacuate area immediately. DO NOT fight fire. Decomposes on heating emitting irritating white fumes of nitrous oxides and ammonium nitrate mist. Brown fumes indicate the presence of toxic oxides of nitrogen.

6. ACCIDENT AL RELEASE MEASURES

Clear area of all unprotected personnel. Shut off all ignition sources. in the case of a transport accident notify the State Police, State Explosives Inspector and Orica-Nitro Co. (Telephone +90 312 865 19 63 - 24 hour service)

7. HANDLING AND STORAGE

Storage: Store cases in a well ventilated magazine suitably licensed for IMCO Class 1.1D Explosives. DO NOT subject the product to impact, friction between hard surfaces or to any form of heating. Do not drill into the explosive.

Product Deterioration : The process of deterioration of this material is a gradual crystallisation of the composition, generally starting from the outside and moving towards the centre. After prolonged storage a slight crusty shell begins to be apparent when the cartridges are squeezed. The product should be test fired before use.

Literary reference

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures : Use in well ventilated area.

Personal protection equipment: Orica Personal Protection Guide No: 1, 1998 : A – Overalls, Safety Shoes.

Avoid eye contact and repeated or prolonged skin contact. Wear standard safety equipment – overalls and safety shoes. Always wash hands before smoking, eating, drinking or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form/Colour/Odour: Grey to cream mixture containing white prills cartridges into plastic 'sausages' with metal clips at both ends. Mild odour.

Solubility : Insoluble in water

Specific Gravity (20C)	: 1.15 - 1.35		
Rel Vapour Density (air1)	: N Av	Boiling Point (C)	: N Av
Vapour Pressure (20C)	: N Av	De comp. Point (C)	: N Av
Flash Point (C)	: N App	Sublimation Point	: N App
Flammability Limits (%)	: N App	pH	: N Av
Auto ignition Temp (C)	: N Av	Viscosity	: N Av
% Volatile by volume	: N Av	Evaporation Rate	: N Av
Solubility in water (g/L)	: Negligible (n- Butyl acetate = 1)		
(Typical values	only – consult specification sheet)		

N Av = Not available N App = Not applicable

10. STABILITY AND REACTIVITY

Stability: Detonation may occur from heavy impact or excessive heating particularly under confinement. Avoid all contact with other chemicals.

11. TOXILIGICAL INFORMATION

Main symptoms : Adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms that may arise if the product is mishandled are:

Ingestion: Swallowing can result in nausea, vomiting, mild gastric irritation, headaches and dizziness.

Eye Contact : May be eye irritant.

Skin Contact: Repeated or prolonged skin contact may lead to irritant contact dermatitis. Can be absorbed through cut, broken or burnt skin.

Literary reference

Inhalation: Not expected to cause respiratory irritation at ambient temperatures.

Long Term Effects: No Information available for product.

Acute toxicity / Chronic toxicity

No LD50 data available for product. The components in the proportions present are not considered to represent a hazard under conditions of good occupational work practice.
Forammonium nitrate(1):
Oral LD50 (rat): 2217 mg/kg
in humans and animals methaemoglobinaemia has occurred under untreated circumstances following the ingestion of nitrates.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

13. DISPOSAL CONSIDERATIONS

Small quantities of damaged or deteriorated material may be destroyed by inciusion in a blast hole containing good explosives. For large quantities of damaged or deteriorated explosives notify Orica Nitro CO.

14. TRANSPORT INFORMATION

Classified as Dangerous Goods for the purpose of transport by road or rail. Refer to relevant regulations for storage and transport requirements.

UN-No 0241
Class 1.1 D Explosive
Hazchem code: E

Proper shipping name: EXPLOSIVE, BLASTING, TYPE E

Segregation Dangerous Goods: Explosives shall not normally be carried on the same vehicle with dangerous goods of other classes, however exemptions may apply.

15. REGULATORY INFORMATION

Not classified as hazardous according to criteria of Work Safe Turkey
Poisons Schedule /Toxic Substance (NZ): N/A - Not Applicable

16. OTHER INFORMATION

Reason For Issue: Alignment to Work safe requirement.
Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This MSDS summarises 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 and use the product in the workplace. Since Orica Limited and its subsidiaries cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

Literary reference

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.

Literary reference