

complying with Regulation 1907/2006/EC (REACH Regulation, 453/2010/EC and Regulation No 1272/2008/EC (CLP)

Version number 1 Printing date 03.12.2014 Revision: 03.12.2014

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

· 1.1 Product identifier

· Trade name: POWER GEL MAGNUM

- · 1.2 Relevant identified uses of the substance or mixture and uses advised against Not applicable
- · Application of the substance / the mixture Explosives
- · 1.3 Details of the supplier of the safety data sheet

VANTOLAS

Grammou Avenue 97 PC 45 445, Ioannina Tel.: 26510 26336 Fax: 26510 73863

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• 1.4 Emergency telephone number: Emergency telephone number: 112

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi; Irritant

Irritating to eyes.



E; Explosive

Risk of explosion by shock, friction, fire or other sources of ignition. R2:

- · 2.2 Label elements
- · Labelling according to EU guidelines:
- · Code letter and hazard designation of product:





Xi Irritant

E Explosive

- · Risk phrases:
- 2 Risk of explosion by shock, friction, fire or other sources of ignition.
- 36 Irritating to eyes.
- · Safety phrases:
- 2 Keep out of the reach of children.
- 25 Avoid contact with eyes.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 56 Dispose of this material and its container to hazardous or special waste collection point.

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- 2.3 Other hazards
- · Results of PBT and vPvB assessment
- PBT: Not applicable.vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description:

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

· Dangerous components:

CAS: 6484-52-2

ammonium <u>nitrate</u>

50-100%

EINECS: 229-347-8

Xi R36; O R8

③ Ox. Sol. 2, H272; **①** Eye Irrit. 2, H319

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- **General information:**

In all cases call a doctor.

Take affected persons out into the fresh air.

Seek immediate medical advice.

· After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

Seek medical treatment in case of complaints.

· After skin contact:

Wash the skin immediately with soap and water.

If skin irritation continues, consult a doctor.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Drink plenty of water and provide fresh air. Call for a doctor immediately.

Seek immediate medical advice.

· 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

· 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray.

· 5.2 Special hazards arising from the substance or mixture

Danger of explosion.

In case of fire, the following can be released:

Nitrogen oxides (NOx)

Nitrous oxide

Do not attempt to fight fire when close to explosives.

- 5.3 Advice for firefighters
- Protective equipment:

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

· Additional information

DO NOT attempt to fight fire when close to explosives. Evacuate immediately the area.

Remove containers from danger area, if safe to do so.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Keep away from ignition sources.

Remove persons from danger area.

Wear protective equipment. Keep unprotected persons away.

• 6.2 Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

Pick up mechanically

Send for recovery or disposal in suitable receptacles.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Explosive material and ignition means, must be used only by suitably trained personnel.

Handle with care. Avoid jolting, friction and impact.

Store the product in original case only, between 0 °C and +30 °C.

Explosives and Blasting accessories must be used by skilled personnel only.

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· Information about fire - and explosion protection:



Keep ignition sources away - Do not smoke.

Prevent impact and friction.

Keep it in a dry, cool, well ventilated, fixed in advance place, away from sources of heat, flames, ignition and direct sunlight.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store in a cool location.

Storage only according to national regulations.

· Information about storage in one common storage facility:

Store away from flammable substances.

· Further information about storage conditions:

Keep container tightly sealed.

Do not seal receptacle gas tight.

Protect from heat and direct sunlight.

Store in the dark.

Store under lock and key and with access restricted to technical experts or their assistants only.

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Respiratory protection:



Use suitable respiratory protective device in case of insufficient ventilation.

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· Protection of hands:

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· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

Eye protection:



Safety glasses

Body protection:



Protective work clothing

SECTION 9: Physical and chemical properties

• 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Solid material **Colour:** grey to white Light · Odour:

· Odour threshold: Not determined

Not applicable · pH value: • Melting point/Melting range: Not determined · Boiling point/Boiling range: Not determined

· Flash point: Not applicable

· Flammability (solid, gaseous): Not determined

Not determined · Auto-ignition temperature:

Decomposition temperature: Not determined

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· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Risk of explosion by shock, friction, fire or other sources of ignition.
· Explosion limits:	
Lower:	Not determined
Upper:	Not determined
· Vapour pressure:	Not applicable
· Density:	Not determined
Relative density	Not determined
Vapour density	Not applicable
· Evaporation rate	Not applicable
· Solubility in / Miscibility with	
water:	Insoluble
· Partition coefficient (n-octanol/wa	ter): Not determined
· Viscosity:	
Dynamic:	Not applicable
Kinematic:	Not applicable
9.2 Other information	Specific gravity: 1,15-1,35

SECTION 10: Stability and reactivity

· 10.1 Reactivity

Explosion may be caused by thrust or intense heating, especially under confined areas.

- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:

To avoid thermal decomposition do not overheat.

Stable at environment temperature.

- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid Avoid heat, sparkles, naked flame or other sources of ignition.
- 10.5 Incompatible materials:

Do not store the product with detonators in the same magazine.

· 10.6 Hazardous decomposition products: No dangerous decomposition products known.

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SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values relevant for classification:

6484-52-2 ammonium nitrate

Oral LD50 2217 mg/kg (rat)

- · Primary irritant effect:
- on the skin: No irritating effect.
- on the eye:

Irritating effect.

Potentially irritant

· Sensitisation: No sensitising effects known.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB**: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation



Dispose according to National Regulations.

- · Uncleaned packaging:
- **Recommendation:** Disposal must be made according to official regulations.

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SECTION 14. T	
SECTION 14: Transport information	n
· 14.1 UN-Number · ADR, IMDG, IATA	UN0241
· 14.2 UN proper shipping name · ADR · IMDG, IATA	0241 EXPLOSIVE, BLASTING, TYPE E EXPLOSIVE, BLASTING, TYPE E
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA	
Claus	1 Evaloring substances and anticles
· Class · Label	1 Explosive substances and articles.1
· 14.4 Packing group	Void
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user · EMS Number:	Warning: Explosive substances and articles. F-A,S-Q
• 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the Code	IBC Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ)	0 Code: E0 Not permitted as Excepted Quantity
· Transport category · Tunnel restriction code	1 B1000C

SECTION 15: Regulatory information

 \cdot 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH Regulation 1907/2006/EC Regulation 453/2010/EC CLP Regulation 1272/2008/EC

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- · Labelling according to EU guidelines:
- · Hazard-determining components of labelling: Label elements at Section 2.2
- · National regulations:
- · Other regulations, limitations and prohibitive regulations
- · Substances of very high concern (SVHC) according to REACH, Article 57

It doesn't contain substances of very high concern (SVHC).

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H272 May intensify fire; oxidiser.

H319 Causes serious eye irritation.

R36 Irritating to eyes.

R8 Contact with combustible material may cause fire.

Department issuing MSDS:

SUSTCHEM Engineering Ltd

REACH & Chemical Services Department

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