

**KAPEKS****MATERIAL SAFETY DATA SHEET**

MSDS have been prepared in according to regulation of safety data sheets on hazardous substances and mixtures (13.12.2014-29204 official newspaper)

Product: Kapeks Nova 65**MSDS Number** : GBF-005
Date of Issue : 11.05.2016
Rev. Number : 01
Rev. Date : 31.10.2018
Page Number : 1/8**1. PRODUCT AND COMPANY IDENTIFICATION**

Product Identification : Kapeks NOVA 65
Usage of Product : Cap sensitive emulsion explosive used for blasting in tunnel and mining operations
Name of Producer : Kapeks Uretim Patlayıcı Maddeler Tic. Ltd. Sti.
Isci Blokları Mah. Mevlana Bulv. Ege Plaza Is Merkezi
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Emergency Phone Number : +90 312 473 74 88 +90 376 518 26 53
National Poison Information Center : 114
Emergency Health Services : 112

2. HAZARDS IDENTIFICATION**Classification of the Mixture**

Regulation on the Classification Packaging and Labelling of Dangerous Substances;

E;R2: Explosives, shock, friction, fire or explosion risk in contact with other sources of ignition

E;R3: Serious explosion risk in contact with shock, friction, flames and other ignition sources

Regulation on Classification, Labelling and Packaging of substances and mixtures;

Explosive 1.1- H201: Explosive; mass explosion damage

Eye Damage Cat.2 – H319: Causes serious eye irritation

Labelling Elements**Warning Sign:** Danger**Hazard Statement;**

H201 : Explosive; mass explosion damage

H319 : Causes serious eye irritation

Precautionary Statements Precaution;

P210 : Keep away from heat / sparks / flames / hot surfaces.- Smoking isn't allowed

P230 : Keep wet

P240 : Put the container and outside packaging on the ground and connect

P250 : Do not expose to grinding / shock / friction

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P264 : After handling wash thoroughly your place that contact with the material
P280 : Wear protective gloves / protective clothing / eye protection / face protection

Precautionary Statements Intervention;

P370+P380 : In case of fire evacuate the area
P372 : In case of fire risk of explosion
P373 : If fire reaches explosives DO NOT FIRE RESPONSE
P305+P351+P338 : IN CASE OF EYE CONTACT: Rinse with water several minutes, remove contact lenses, continue rinsing
P337+P313 : If eye irritation is permanent: medical advice / attention

Precautionary Statements Storage;

P401 : Store in appropriate storage conditions

Precautionary Statements Disposal;

P501 : Dispose the contents and container according to the procedure with the expert control

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance	%(w/w)	CAS No	EC No	CPL- Classification	CLP-Classification
Sodium Perchlorate	<10	7791-07-3	616-573-0	O;R9 Xn;R22	Ox. Solid 3-H272 Eye Irr. 2- H319
Sodium Nitrite	< 1	7632-00-0	231-555-9	O;R8 T;R25 N;R50	Ox. Solid 3-H272 Acute Tox.3-H301 Aquatic Acute 1-H400 Eye Irr. 2- H319
Sodium Thiocyanate	< 1	540-72-7	208-754-4	R20/21/22 R32 R52/53	Acute Tox.4-H302-H312-H332 Eye Irr. 2- H319 Aquatic chronic 3-H412
Microcrystalline Wax	< 5	63231-60-7	264-038-1	Not classified as dangerous.	Not classified as dangerous. Eye Irr. 2-H319
Paraffine Wax	< 5	8002-74-2	232-315-6	Not classified as dangerous	Not classified as dangerous.
Mineral Oil	< 1	8042-47-5	232-455-8	---	Asp. Tox.1-H304
Acedic acid	< 1	64-19-7	200-580-7	C;R34	Flamm. Liquid 3; H226 Skin Irr. 1B; H314
Sodium acetate Anhydr.	< 1	127-09-2	204-823-8	Not classified as dangerous	Not classified as dangerous.

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Surfactant	< 5	---	---	R22 R36/37/38 S1/2,S45,S61,S36/37/39	Acute Tox. Inh. Cat.4-H332 Acute Tox. Skin Cat.4-H312 Acute Tox. Oral Cat.4-H302 Eye Irr. Cat.2-H319
Aluminum	< 5	7429-90-5	231-072-3	F;R15,R17	Pirofobik solid 1- H250 contact with water release flammable gas 2- H261
Amonium Nitrate	< 80	6484-52-2	229-347-8	O;R8 Xi;R36	Ox. Solid 3-H272 Eye Irr. 2-H319

4. FIRST AID MEASURES

- Ingestion** : The mouth is rinsed with water. Should drink plenty of water, even in case of vomiting should be given more water and medical attention must be done
- Eye contact** : Should be washed with cold water for 15 minutes and medical attention should be done
- Skin Contact** : Clothes should be removed and washed before wearing again. The area which is in contact with the product it should be washed with soap and water and incase of continuation of symptoms medical attention should done
- Inhalation** : N/A
- Symptoms** : None
- Clinical Advices** : If taken in excess through the mouth patient must be vomiting

5. FIRE - FIGHTING MEASURES

- Extinguishing Media** : If product is on fire, all personel should remove from area immediately and send personel to a safe location some distance away from the fire. High risk of explosion if involved in fire. **DO NOT TACKLE FIRES INVOLVING EXPLOSIVES LOADS.** Large quantities of water may be used for cooling purposes if product is at risk from fire/heat.
- Extinguishing Media Not to be used** : All other media
- Exposure Hazards** : ---
- Resulting Gases** : Nitrous fumes, ammonia, water vapour, carbon dioxide, carbon monoxide, nitrogen
- Combustion Products** : Nitrogen, carbon dioxide, water vapour, ammonia, carbon monoxide
- Protective Equipment for firefighters** : As HAZCHEM/UN 0241 requirements

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Page Number : 4/8**6. ACCIDENTAL RELEASE MEASURES****Personel Precautions;**Removal of Ignition Sources : Yes
Provide Adequate Ventilation : No
Provide Respiratory Protection : Only in fire situation
Control Dust : N/A
Prevent Eye and Skin Contact : Yes**Environmental Precautions;**Keep away from drains : Yes
Keep away from groundwater : Yes
Keep away from soil : Yes
Alert Neighbourhood : N/A**Clean Up Methods;**Use absorbent material : No, collect spills with proper collection instruments
(It will be collected in heavy-duty plastic bags or in drums labeled according to the destruction)
Use binder : No
Dilute with water : No
Never use with : Never use with copper, zinc and brass instruments
Neutralise with : N/A
Safe Handling : Use protective gloves
Ventilation : N/A
Dust : N/A
Aerosol Effects : N/A
Fire : See local emergency procedures or Section 5**7. HANDLING AND STORAGE****Incompatible materials** : Do not store with detonators
Temperature : - 15 °C to +35°C. Seek appropriate advice if operating outwith these temperatures
Humidity : With proper packaging with regulation will not affect the normal climate conditions
Electrical Equipment : It should be selected in appropriate electrical classification
Static electricity : N/A
Quantity Limits : As defined in statutory licence
Shelf Life : It is recommended to consume within 1 year from production date**8. EXPOSURE CONTROLS / PERSONEL PROTECTION****Respiratory Protection** : N/A

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Hand Protection : If dispersed product present wear gloves
Eye Protection : Avoid contact with eyes
Skin Protection : Avoid contact with skin

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Physical form : Putty-like consistency containing dispersed prills
Colour : White
Odour : None
pH of substance/solution : 4.00
Boiling point/boiling range : N/A
Melting point/melting range : N/A
Flash Point : N/A
Flammability(solid/gas) : Non flammable
Ignition : N/A
Explosive properties : High, mass explosion damage
Oxidising properties : Medium
Vapour pressure : N/A
Relative Density : Range 1,20-1,22 g/cm³
Solubility : None (water resistant)
Mixibility : Immiscible
Evaporation Rate : N/A
Conductivity : N/A
Viscosity : Solid
Explosion Limits : Velocity of detonation 5100-6200 m/s

10. STABILITY AND REACTIVITY

Conditions to Avoid;
Temperature : Strage temperature exeed 35 °C should be avoided. This is a precaution to rnsure aproprate shelf life
Pressure : N/A
Light : N/A
Impact : N/A
Friction : N/A
Ignition : N/A
Water : No
Air : No
Acids : Yes
Bases/Alkalis : Yes
Oxidisers : Yes
Specific Substances : N/A
Stabilisers required : No

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Exotherm possible : Yes
Physical appearance change : Hardening or crystallisation with storage
Contact with water : No effect
Degradation to unstable : Not under normal conditions of use

11. TOXICOLOGICAL INFORMATION

Inhalation : N/A
Ingestion : Harmful if swallowed
Dermal : Mild irritant
Eye Contact : Yes
Sensitiser : Possible to skin
Carcinogen : No
Mutagenic : No
Narcotic : No
Teratogenic : No
Toxic : No

12. ECOLOGICAL INFORMATION**Mobility;**

Known or predicted distribution to environmental compartments : No
Surface Tension : High
Absorption/desorption : Low
Other relevant physical properties : No data

Degradability;

Biotic and abiotic degradation : Harmless
Aerobic and anaerobic degradation : Yes
Persistence : Moderate

Accumulation;

Bioaccumulation potential : Low
Biomagnification : Low

Short/Long Term Effects;**Ecotoxicity**

Aquatic organisms : Low
Soil organisms : Low
Plants and terrestrial animals : Low

Other adverse effects

Ozone depletion potential : Low
Photochemical ozone creation : Low
Global warming potential : Low
Effects on waste water treatment plants : None

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An initial data search has established that there is little or no environmental or ecological effects data available on this product.

13. DISPOSAL CONDITIONS

Waste Disposal : The contaminated material is to be placed down a borehole to be utilized as part of the blast

Waste disposal for others;

Substance : Burning or detonation under controlled conditions
Mixture : With combustion procedure made by expert person
Contaminated Packaging : Controlled burning accordig to procedures

Disposal Methods;

Incineration : Open burning in small quantities within licenced area under supervision by expert person
Recycling : No
Flush : If accordance with waste disposal regulations

14. TRANSPORT INFORMATIONS

UN Name : Explosive, Type E
UN Number : UN 0241
IMDG (sea) Code/Class : 1.1 D
Packing Group : -
RID/ADR (road/rail) : 1.1 D
Packing Group : -

In trasportation of explosive materials must be considered compliance with the requirement of Regulation No. 87/12028 or if needed international hazardous materials packaging agreements.

15. REGULATORY INFORMATIONS

Regulation on the compilation of safety data sheets of the Dangerous Substances and Preparations
Regulation on Classification of Dangerous Substances and Preparations, Packaging and Labelling
Regulation on Classification, Labelling and Packing of substances and mixtures
Regulation on the Safety Data Sheets of Hazardous Substances and Mixtures
Regulations on the Transport of Dangerous Materials by highway
Regulation no 87/12028

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16. OTHER INFORMATIONS**Risk Phrases;**

R8 : It may cause fire in contact with combustible material
R15 : It will release flammable gases when contact with water
R17 : Spontaneously flammable in air
R20/21/22 : Harmful if inhalation, in contact with skin and swallowed
R25 : Toxic if swallowed
R32 : In contact with acids release toxic gas
R34 : It causes burns
R36 : Irritating to eyes
R36/37/38 : Irritates eyes, respiratory system and skin
R50 : It is very toxic to aquatic organisms
R52/53 : Harmful to aquatic organisms, It may cause long-term adverse effects in the aquatic environment

Hazardous Phrases;

H226 : Flammable liquid and vapor
H261 : Diffuse flammable gases upon contact with water
H272 : It can strengthen the fire, oxidizing
H301 : Toxic if swallowed
H302 : Harmful if swallowed
H304 : If respiratory tract influenced and swallowed fatal
H312 : Harmful in contact with skin
H314 : Cause serious skin burns and eye damage
H319 : Cause serious eye irritation
H332 : Harmful by inhalation
H400 : It is very toxic in aquatic environments
H412 : In the aquatic environment, long persistent, harmful effects

Key Information Sources;

This material safety data sheet is prepared based on informations received from KAPEKS ÜRETİM LTD. ŞTİ.

Revision:

First Issue. This material safety data sheet is prepared regarding to the 13.12.2014 dated and 29204 number of Regulation on Safety Data Sheets of Hazardous Substances and Mixtures.

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