

**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 100**MSDS Number** : GBF-009
Date of Issue : 09.06.2016
Rev. Number : 01
Rev. Date : 31.10.2018
Page Number : 1/7**1. PRODUCT AND COMPANY IDENTIFICATION**

Product Identification : Kapeks 100
Usage of Product : Water-resistant booster-sensitive emulsion explosives for mining industry
Name of Producer : Kapeks Uretim Patlayıcı Maddeler Tic. Ltd. Sti.
Isci Blokları Mah. Mevlana Bulv. Ege Plaza Is Merkezi
No:182B Kat:22 No:100 Cankaya/Ankara/TURKEY
Phone : +90 312 473 74 88
Fax : +90 312 473 61 51
E-mail : kapeks@kapeks.com.tr
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
P264 : After handling wash thoroughly your place that contact with the material

**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 100

MSDS Number : GBF-009
Date of Issue : 09.06.2016
Rev. Number : 01
Rev. Date : 31.10.2018
Page Number : 2/7

P280 : Wear protective gloves / protective clothing / eye protection / face protection

Precautionary Statements Intervention;

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

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

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
Amonium Nitrate	< 76	6484-52-2	229-347-8	O;R8 Xi;R36	Ox. Solid 3-H272 Eye Irr. 2-H319
Sensitizing	< 0,2	-	-	F;R11	Flame.Solid.2,H228
Mineral Oil	< 5	8042-47-5	232-455-8	-	Asp. Tox.1-H304
Surfactant	< 2	-	-	Xn;R22 Xi;R36/R37/38	Acute Tox. Inh. Cat.4-H332 Acute Tox. Skin Cat.4-H312 Acute Tox. Oral Cat.4-H302 Eye Irr. Cat.2-H319

4. FIRST AID MEASURES

Ingestion : The mouth is rinsed with water.

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 : It does not cause chemical exposure.



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 100

MSDS Number : GBF-009
Date of Issue : 09.06.2016
Rev. Number : 01
Rev. Date : 31.10.2018
Page Number : 3/7

5. FIRE - FIGHTING MEASURES

- Fire Extinguishing Agent** : Immediately apply plant emergency evacuation plans. All personnel should be evacuated to a predetermined safe area at least 800 meters.
- Fire Hazard** : Fire may cause explosion on the area. Burning material may remove toxic vapors.
- Explosion Hazards** : There is a risk of explosion by shock, friction, fire or other sources of ignition.
- Hazardous Combustion Products** : Nitrogen Oxides (NO_x), carbon monoxide (CO), ammonia, carbon dioxide (CO₂), nitrogen (N₂).

6. ACCIDENTAL RELEASE MEASURES

- Personal Precautions** : Avoid contact with eyes, skin and clothing. Do not smoke. Eliminate any ignition sources of any kind.
- Protective Equipment** : Completely closed protective eyewear appropriate edges, appropriate nitrile gloves, work clothes, work shoes use.
- Environmental precautions** : Try to stop the leak without being exposed to any dangers. Avoid contaminating sewers and drinking water. Inform the authorities in case of mix sewer or underground water.
- Emergency Procedure** : Remove from media sources of ignition.
- Cleaning Method** : Keep away from all ignition sources. If there is no contamination of the product, it should attempt to retrieve a clean container. Remaining material should be mixed with sand and used in blasting operations or burn with expert.
- Related Sections** : Section 8 and 13 for additional information.

7. HANDLING AND STORAGE

- Precautions for Safe Use** : Appropriate nitrile gloves should be used. Smoking and hot work (welding, cutting, etc ...) in the application area should be prohibited. Do not mix with any chemicals.
- Warnings to protect against fire and explosion** : Prevent uncontrolled contact with the material are incompatible with each other. Avoid contact with flames, shock, friction and other ignition sources. Keep fire fighting equipment ready for.
- Shelf Life:** The shelf life of this product is 1 year.
- Storage;**
- Looking for storage areas and Packaging Specifications:** It should be stored according to regulations. Storage areas should be dry and be sure that there is natural ventilation. Smoke, fire, hot work (welding, cutting, drilling ...) should be banned. Store the mixture in the original pack. Magazine must be lockable. Unauthorized persons should not be enter.
- Common Storage Storage Related Alerts** : Follow the general rules of storage chemicals. Storage material according to hazardous materials storage matrix.

**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 100**MSDS Number** : GBF-009
Date of Issue : 09.06.2016
Rev. Number : 01
Rev. Date : 31.10.2018
Page Number : 4/7**8. EXPOSURE CONTROLS / PERSONEL PROTECTION****Personal Protection Equipment;****KORUYUCU
GÖZLÜK KULLAN****iŞ ELĐİVENİ
GiY****iŞ ELBİSENİ
GiY****Respiratory Protection** : These products do not cause chemical exposure under normal use conditions.**Hand Protection** : Chemical resistant gloves (EN 374).**Eye Protection** : Eye protection glasses with side shields should be used (EN 166).**Safety and Hygiene Precaution** : Use according to industrial hygiene and safety precaution.

Do not inhale. Keep away from food, drink and animal feed. Do not eat, drink or smoke.

Immediately remove contaminated clothes. Hands and face should be washed after the break and before the end of the shift.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance and Physical form** : Emulsion gel**Colour** : White**Odour** : N/A**pH** : N/A**Melting Point** : N/A**Boiling Point** : N/A**Freezing Point** : N/A**Density** : 1,21 to 1,25 g / cm³**Viscosity @ 40 °C** : 80.000-120.000 cP**Resolution** : Not Soluble**Decomposition Temperature** : Ammonium Nitrate: 210 ° C (410 ° F)**Vapor Pressure** : N/A**Oxidation Features** : Decomposition is a powerful oxidant**Explosion Feature** : Explosives, mass explosion damage**Explosion Data Explosion speed** : 5000-5500 m/s (125 mm cartridge exposed)



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 100

MSDS Number : GBF-009
Date of Issue : 09.06.2016
Rev. Number : 01
Rev. Date : 31.10.2018
Page Number : 5/7

Static Explosion Data : Not Sensitive Electrical Sensitivity
Explosion Data Impact : Not Sensitive Sensitivity

10. STABILITY AND REACTIVITY

Stability : Stable under normal temperatures and pressures.
Reactivity : Stable at normal conditions. Risk of explosion contact with fire or high-energy shock. Do not mix with chemicals.
Conditions to Avoid : Keep away from sources of heat, flames and shock.
Incompatible Chemicals : Corrosive (strong acids and strong bases or alkeran), strong oxidizing agents, reducing agents.
Hazardous Combustion Products : Nitrogen Oxides (NOx), carbon monoxide (CO), ammonia, carbon dioxide (CO₂), nitrogen (N₂).

11. TOXICOLOGICAL INFORMATION

Acute Toxicity : Not classified
Irritation: Not irritating to skin. Eye contact can cause severe irritation
Fatal or Skin Sensitisation : Not classified
Carcinogenicity : There is doubt on causing cancer. There is no conclusive evidence.
Specific Target Organ Toxic : Not classified
Reproductive Toxicity : Not classified
Aspiration Loss : Not classified
Additional information on toxicology;
Ammonium Nitrate (6484-52-2)
Oral LD50 (mouse) : 4500 mg / kg
Oral LD50 (mouse) : 2800 mg / kg
Inhalation LC50 (4 hr.) (Mouse) : > 88.8 mg / l
Mineral Oil (8042-47-5)
LD50 oral (Mouse) : > 5000 mg / kg
LD50 Skin (rabbit) : > 2000 mg / kg

12. ECOLOGICAL INFORMATION

Ecotoxicity : Not regarded as dangerous for the environment
Mobility : The product does not mix with water. Do not spread in the aquatic environment
Bioaccumulation potential : There is no data about biological accumulation
Additional Info About Environment Ecology;
Ammonium Nitrate (6484-52-2)
LC50 (48h) fish : 1,15 – 1,72 mg NH₃/L (Cyprinus Carpio)
Aquatic Invertebrates EC50 : 555 mg/L (Daphnia magna)



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 100

MSDS Number : GBF-009
Date of Issue : 09.06.2016
Rev. Number : 01
Rev. Date : 31.10.2018
Page Number : 6/7

Algae EC50 : 83 mg/l (Scenedesmus quadricauda)
Mineral Oil (8042-47-5)
LL50 Fish (96h) : > 2000 mg/kg (Lepomis macrochirus Rafiresqua)
Fish LC50 (96h) : > 10 g/l (Lepomis macrochirus)

13. DISPOSAL CONDITIONS

General Disposal Information : Waste must be disposed in accordance with local regulations.

Safe Disposal : Explosive waste must be disposed in blasting holes on mines or it must be disposed by burning in the explosives test site.

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 transportation 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

16. OTHER INFORMATIONS

Risk Phrases;

R8 : Contact with combustible material may cause fire
R11 : Highly flammable
R22 : Harmful if swallowed
R36 : Irritating to eyes
R36/37/38 : Irritating to eyes, respiratory system and skin irritant

**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 100

MSDS Number	: GBF-009
Date of Issue	: 09.06.2016
Rev. Number	: 01
Rev. Date	: 31.10.2018
Page Number	: 7/7

Expressions harmfulness;

H228 : Flammable solid
H272 : Can strengthen fire, oxidizing
H302 : Harmful if swallowed
H304 : Fatal if penetrate the respiratory tract and swallowed
H312 : Harmful in contact with skin
H319 : Causes serious eye irritation
H332 : Harmful if swallowed

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.

Prepared by:

Name Surname: Aybala Bektaş

Contact Informations: aybala@kapeks.com.tr

Certificate No: 01.166.01

Certificate validity date: 23.10.2021