SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

1 SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Substance / mixture

Mixer Name : POWERMITE® MAX

CAS No : Not applicable

EC No : Not applicable

KKDIK Registration Number: Not applicable

1.2. Identified Uses of the Substance or Mixture and Uses Not Recommended

Uses Identified: It is an emulsion type cap-sensitive explosive intended for civilian use. It is manufactured as cartridged.

Uses not recommended: It should not be used except for industrial explosive production and blasting applications.

1.3. Details of the supplier of the safety data sheet

Manufacturer : Nitromak Dnx Kimya Sanayii A.Ş.

Address : Beştepe Mahallesi, Nergis Sokak No: 7/2-52, 06510, Yenimahalle, Ankara

Phone : +90 312 201 77 00

Fax : +90 312 201 77 02

E-mail : : osmanerdem@nitromak.com

1.4. Emergency Telephone Number

Nitromak Dnx Kimya Sanayii A.Ş. : 0 312 201 77 00
Work Hours : 08:00 – 17:30 (weekdays)

Emergency Call Center : 112

National Poison Information Center (NPIC): 114

2 HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixtures (28848 T.C.)

Physical and Chemical Hazards : Explosive 1.1D -H201

Health Hazards : Skin Irrit. 2-H315
Eye Irrit. 1- H318
STOT 3- H335

Environmental Hazards : Aquatic Chronic 3- H412

SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

2.2. Label elements

Label In Accordance with (28848 T.C.)

GHS Pictogram:

Signal Word : Danger

Hazard Statements : H201: Explosive; mass explosion hazard.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H335: May cause respiratory irritation.

H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements :

P210- Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P234- Keep only in original container.
P250- Do not subject to grinding/shock/friction.
P261- Avoid breathing dust/fume/gas/mist/vapors/spray.
P264- Wash contaminated skin or hands thoroughly after handling.
P271- Use only outdoors or in a well-ventilated area.
P273- Avoid release to the environment.
P280- Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352- IF ON SKIN: Gently wash with plenty of soap and water.
P304+P340- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312- Immediately call NATIONAL POISON CENTER FROM 114 or doctor/physician.
P321- Specific treatment (see on this label).
P332+P313- If skin irritation occurs: Get medical advice/attention.
P362+P364- Take off contaminated clothing and wash before reuse.
P370+P372+P380+P373- In case of fire: Explosion risk! Evacuate area! DO NOT fight fire when fire reaches explosives.
P401- Store in accordance with national regulations.
P403+P233- Store in a well-ventilated place. Keep container tightly closed.
P405- Store locked up.
P501- Dispose of contents/container to in accordance with national regulations.

2.3 Other Hazards

SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

PBT or vPvB assessment results according to KKDIK Annex-13

PBT : Not applicable.
vPvB : Not applicable.

3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance : Not Applicable

3.2. Mixtures :

Name	EC No EINECS No	CAS No	Content	Hazard Class and Category Code	Hazard Statements	Other Component-Related Information
Ammonium nitrate	229-347-8	6484-52-2	70-90 %	Oxidising solid 3 Skin Irritation 2 Eye irritation 2 STOT Single Exp.3	H272 H315 H319 H335	-
Sodium Nitrate	231-554-3	7631-99-4	0-12 %	Oxidising solid 3 Skin Irritation 2	H272 H315	-
Calcium Nitrate	239-289-5	15245-12-2	0-12 %	Acute toxicity-4 Eye Damage -1	H302 H318	-
Sodium Perchlorate	616-573-0	7791-07-3	0-12 %	Oxidising solid 1 Acute toxicity-4	H271 H302	-
Citric acid	201-069-1	77-92-9	0-1%	Eye irritation 2	H319	-
Sodium Nitrite	231-555-9	7632-00-0	0-1%	Acute toxicity-3 Oxidising solid 3 Acute Aquatic-1	H301 H272 H400	-
Sodium thiocyanate	208-754-4	540-72-7	0-0,5%	Not classified as hazardous	-	
Paraffin waxes and Hydrocarbon waxes	232-315-6	8002-74-2	3-5%	Not classified as hazardous.	-	-
Sorbitan Oleate	215-665-4	1338-43-8	0,1-1,0 %	Not classified as hazardous.	-	One of the compounds in emulsifier.

SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

Aluminium, granular	231-072-3	7429-90-5	2-7%	Not classified as hazardous.	-	-
İsobutane	200-857-2	75-28-5	0-0,5 %	Extremely flammable gas 1 Liquefied gas, Compressed gas	H220 H280	One of the compounds in micro balloon.
isopentane	201-142-8	78-78-4	0-0,5 %	Flammable Liquid 1 STOT Single Exp. 3 Aspiration Hazard 1 Long-Term Aquatic 2	H224 H336 H304 H411	One of the compounds in micro balloon. EUH066
1,1-dichloroethylene;	200-864-0	75-35-4	0-0,5 %	Flammable Liquid 1 Acute toxicity 4 Carcinogenicity 2	H224 H332 H351	One of the compounds in micro balloon.

The full text of the hazard statements is given in Title 16.

About the composition

- Data has been submitted to the latest by T.C and A.B. given in accordance with the regulations

4 FIRST AID MEASURES YARDIM ÖNLEMLERİ

4.1. Description of first aid measures

General Information
No special precautions are necessary.

Inhalation
Immediately move the casualty away from the exposure area. In case of inhalation, remove casualty to fresh air.
If symptoms persist, consult a doctor.

Ingestion
Consult a doctor if a large amount is retained. DO NOT vomit! Rinse mouth immediately and remove to fresh air.
Consult a doctor if any discomfort persists.

Skin Contact
Remove affected person from contamination site. Take off contaminated clothing. Wash skin immediately with soap and water.
If symptoms occur after washing, seek medical advice immediately.

Eye Contact
Move casualty immediately away from exposure area. If there are contact lenses, they should be removed before rinsing the eyes.
Rinse eyes immediately with plenty of water, opening the eyelids. Call a healthcare professional by continuing to rinse for at least 15 minutes.

4.2. Indication of any immediate medical attention and special treatment needed

Inhalation: Irritation of upper respiratory tract.
Ingestion: Nausea, vomiting.
Skin Contact: Prolonged contact may cause redness, irritation and drying of the skin.
Eye Contact: Irritation of eyes and mucous membranes.

SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

4.3. Indication of need for medical attention and special treatment

No specific treatment is recommended. Treat according to symptoms.

5 FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

It has no application. Once the fire reaches the explosives, DO NOT interfere with the fire.

Unsuitable extinguishing media

It has no application. Once the fire reaches the explosives, DO NOT interfere with the fire.

5.2. Specific hazards during firefighting

Unusual fire and explosion hazards

DO NOT interfere with the fire. Evacuate all personnel to a predetermined safe area that is at least 1,000 meters in all directions. In case of fire, it may explode or explode.

Harmful combustion products

In case of fire, toxic gases may be produced. Carbon monoxide (CO). Nitrogenous gases (NOx).

5.3. Specific extinguishing methods

In the event of a small fire, move the products away from the fire area if the fire has not reached the explosives. Prevent fire from reaching the product by using all possible firefighting equipment (water, available fire extinguishing materials)

DO NOT INTERFERE TO FIRE CONTAINING EXPLOSIVE MATERIAL. Evacuate all personnel to the predetermined safe zone.

Special protective equipment for firefighters

Use breathing apparatus for firefighting. Use full protective clothing.

6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

protective equipment

It has no application.

Emergency Procedures

It has no application.

6.1.2 For Emergency Responders

Remove persons from the danger area. Provide adequate ventilation. Use protective clothing. Protect from heat. Evacuate the space. Isolate the area and block access.

Wear protective clothing as shown in Heading 8 of this Safety Data Sheet

6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter drains or waterways

6.3. Methods and materials for containment and cleaning up

Wear the necessary protective device. Extinguish all ignition sources. Avoid sparks, flames, heat and avoid smoking. Ventilate.

6.3.1 For containment

SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

Collect and store in containers and seal securely. Put the container in a solid/safe place.

6.3.2 For cleaning

Collect mechanically. Put them in suitable containers and send them for recycling or disposal.

6.3.3 Other information

Dispose of unused material as waste under Title 13.

6.4. Reference to other sections
For personal protection see section 8.
See Section 11 for additional information on health hazards.
For waste disposal, see section 13

7 HANDLING AND STORAGE

7.1. Advice on safe handling
Read and follow the manufacturer's recommendations. Avoid contact with skin and eyes. Protect from heat, sparks and fire. Avoid any possibility of ignition. Do not eat, drink or smoke during use. Consider necessary chemical hygiene measures Avoid jolting, rubbing and impact. Handle carefully. Use only in well ventilated areas. Do not subject to grinding / shock / friction.

Fire and explosion protection information
Protect from heat. In case of fire in the vicinity, emergency cooling should be done.

7.2. Conditions for safe storage

Requirements for magazine and containers
Store in a cool, well-ventilated and dry place. Protect from physical damage and/or friction. Do not store near excessive heat, sources of ignition or open flame. Do not store near excessive heat, sources of ignition or open flame. Combustible/flammable – keep away from oxidizers, heat and flames. Do not store near producing areas, do not expose to high temperatures. Keep away from strong shocks.

Information about storage in a single shared storage facility
Keep away from food, drink and animal feed.

Additional information on storage conditions
Store in cool, dry conditions in tightly closed containers. Keep away from heat.

7.3. Certain end uses
No other additional information is available.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1 Occupational exposure limit values

8.1.1.1 Occupational exposure limit values according to the Regulation on Health and Safety Measures in Working with Chemical Substances

Name	Standard	TWA-8 Hours		PEL:15mg/m^3		Notes
Ammonium nitrate	TLV		10 mg/m^3	-		ACGIH (TAB.1995-96)
	PEL			**15**		OSHA (total dust), 5mg/m3 inhalable value

SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

Sodium Nitrate						
Calcium Nitrate	DNEL (skin)	13.4 mg/kg bw /day				
	DNEL (inhalation)		98 mg/ m^3			
Paraffine wax	TLV		2 mg/m^3			ACGIH

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

TWA: Time weighted average

ACGIH : American Conference of Governmental Industrial Hygienists

DNEL: Derived No-Effect Level

PNEC: Predicted No-Effect Concentration

WEL: Workplace exposure limit

8.1.1.2 Occupational exposure limit values according to the Regulation on Health and Safety Measures in Working with Carcinogenic and Mutagenic Substances

No data

8.1.1.3 Other occupational exposure limit values

No data.

8.2. Exposure controls

8.2.1 Engineering measures

Eye washes and showers for emergency use. Local ventilation recommended - mechanical ventilation may be used.

Measures for the substance / mixture to prevent exposure during specified uses

Do not swallow. If swallowed, seek medical advice immediately.

Structural measures to prevent exposure

Keep it sealed until you dispose of it or reuse it later.

Organizational measures to prevent exposure

Establish procedures for the safe use and maintenance of controls.

Educate employees on the hazards and control measures associated with normal activities with this product.

Ensure equipment used to control exposure, such as personal protective equipment, local exhaust ventilation, is correctly selected, tested and maintained.

8.2.2 Personal protective equipment

8.2.2.1 Eyes and face protection

Use goggles that comply with the EN 166 standard, providing protection against mechanical hazards.

SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

8.2.2.2 Skin and body protection

Hand protection

Use gloves that comply with the EN 388 standard, providing protection against mechanical hazards.

Thickness of the glove does not indicate that it has good chemical resistant protective properties, since it depends on the exact composition of the glove material. The suitability and durability of a glove depends on use, i.e. the frequency and duration of contact, the chemical resistance of the glove material, and its dexterity inside the hands and fingers. Always seek advice from glove suppliers. Contaminated gloves should be changed. Individual hygiene is important to ensure effective hand care. Gloves should only be worn when hands are clean. After using gloves, hands should be thoroughly washed and dried. It is recommended to use a perfume-free moisturizer.

Other skin protection

Wear protective work clothing.

8.2.2.3 Respiratory protection

Not required under normal use. Respiratory protection may be required after product use.

8.2.2.4 Heat damages

Not applicable.

8.2.3 Environmental exposure controls

Measures for the substance / mixture to prevent exposure

Not applicable.

Instructional measures to avoid exposure

Not applicable.

Organizational measures to prevent exposure

Not applicable.

SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

Technical measures to prevent exposure

Not applicable.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information about basic physical and chemical properties

Appearance	Liquid
Colour	Slightly brown or white
Odour	Slight oily scent or distinctive
Odour Threshold	Not applicable
pH Value	Not applicable
Melting / Freezing point	Not applicable
Initial Boiling Point / Boiling Range	Not applicable
Flash Point	Not applicable
Evaporation range	Not applicable
Flammability (solid, gas)	Fire or projection hazard.
Upper/Down Flammability or Explosion Limit	Not applicable
Vapor Pressure	Not applicable.
Steam Density	Not applicable
Density	1.11-1.16 g/cm^3 (cold density)
Solubility (water)	It is insoluble in water.
Flammability Temperature	No data available.
Decomposition Temperature	No data available.
Dynamic Viscosity	No data available.
Kinematic Viscosity (Viscosity)	Not applicable
Explosiveness	Heating may cause an explosion. It is explosive.

9.2 Other Information

No additional information is available.

10 STABILITY AND REACTIVITY

10.1 Reactivity

The product is stable under normal handling and storage conditions.

SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

10.2 Chemical Stability
It does not cause harmful reactions if transported and stored according to regulations.

10.3 Possibility of Hazardous Reaction
Explosion hazard. Toxic fumes may be released if heated above the decomposition temperature.

10.4 Conditions to avoid
Do not store at temperatures above 40°C, heat, flame, ignition sources, strong shock, electrostatic discharge.

10.5 Incompatible Materials
Incompatible with acids (e.g., nitric acid), metal powders, combustibles, alkalis (e.g., hydroxides), oxidizing agents (e.g., hypochlorite), chloride salts, sulphur, urea, nitrites and reducing substances (explosive).

10.6 Hazardous Decomposition Products
When heated, toxic gases can be formed (carbon/nitrogen oxides, hydrocarbons).

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

- LD50(oral) 2217 mg/kg (rat) [European Bureau of Chemicals; IUCLID, January 22, 2007] – Data on Ammonium Nitrate
- LD50 Rat oral 4500 mg/kg. [Canadian Environment; Tech Info for Problem Spills: p.59 (1981)] - Data on Ammonium Nitrate
- LD50 Rat oral 2800 mg/kg bw [European Bureau of Chemicals; IUCLID, January 22, 2007] - Data on Ammonium Nitrate
- Oral (rat) lowest toxic dose: 10 mg / kg Blood: May cause methaemoglobin - Data on Ammonium Nitrate
- LD50 > 39.8 g/kg Acute Toxicity - Oral (oral-rat) data - Test data of emulsifier
- LC50 > 10-20 mg/l Acute Toxicity-inhalation (oral-rat) data - Test data of emulsifier
- LD50 > 2000 mg/kg Acute Toxicity-skin route (dermal-rat) data- Test data of mineral oil
- LD50 > 2000 mg/kg bw Acute Toxicity - Oral (oral-rat) data , OECD 401- Test data of sodium nitrate data
- LD50 > 2000 mg/kg bw Akut Toksisite- skin route (dermal-rat) data - Test data of sodium nitrate & calsium nitrate
- LC50 > 0,527 mg/l Akut Toksisite- inhalation (oral-rat) data; -Test data of sodium nitrate
- NOAEL ≥1500 mg/kg bw 28 day-Sub-acute toxicity- OECD 422- Test data of sodium nitrate
- LD50 > 500 mg/kg Oral (oral-rat) data; OECD 423- Test data of Calcium nitrate
- NOAEL ≥1000 mg/kg bw 28 day Sub-acute toxicity - OECD 407- Test data of Calcium nitrate
- LD50 > 5000 mg/kg Acute Toxicity - Oral (oral-rat) data - Test data of paraffine
- LD50 > 2000 mg/kg Acute Toxicity-skin route (dermal-rat) data - Test data of paraffine
- LD50 > 5400 mg/kg Acute Toxicity - Oral (oral-rat) data -OECD 401 - Test data of citric acid
- LD50 > 2000 mg/kg Acute Toxicity-skin route (dermal-rat) data - OECD 402 - Test data of citric acid
- LD50 > 157,9 mg/kg Acute Toxicity - Oral (oral-rat) data - Test data of sodium nitrite
- LD50 > 764 mg/kg Acute Toxicity - Oral (oral-rat) data - Test data of sodium thiocyanate

Skin corrosion/irritation

SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

It irritates the skin.

See OECD 405-sodium nitrate and ammonium nitrate data.

Skin-Rabbit-mild skin irritation-moderate-500mg/24 hours- paraffine test data

Serious eye damage/irritation

Irritating to eyes.

Eyes- Rabbit- Mild eye irritation-moderate-100 mg/24 Hours

Eyes-Rabbit-Irritating to eyes-OECD 405-Citric acid data

Eyes-Rabbit-Irritating to eyes- 24-hour-OECD 405-Sodium nitrite data

Skin or respiratory sensitization:
It causes irritation in the respiratory tract and clogging of the lungs.
LC50 Rat 4 hours (Inhalation) > 88.8 mg/L [European Bureau of Chemicals; IUCLID, January 22, 2007]-Ammonium nitrate test data

Acute oral toxicity
Causes irritation in the digestive system. May cause nausea or vomiting.

Germ cell mutagenicity
No data.

Carcinogenicity
No data.

Reproductive Toxicity

No data.

STOT-single exposure

Includes respiratory tract irritation.

STOT-repeated exposure

Target Organs: Blood, thymus, liver

Remarks: May cause damage to organs through prolonged or repeated exposure.

Aspiration

No data.

12 ECOLOGICAL INFORMATION

12.1 Toxicity

Acute (short term) toxicity :

Fish: LC50 Cyprinus carpio 1.15 - 1.72 mg NH3 / L (48 hours)-Ammonium nitrate test data

LC50 many types 420 -. 1,360 mg NO3 / L (96 hours) - Ammonium nitrate test data

Acute LC50 >100 mg/l Freshwater Fish - Pimephales promelas

SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

LC50 fish (freshwater): 1354 mg/L (96 hours) -Sodium nitrate test data
LC50 fish (sea) : 4400 mg/L (96 hours) -Sodium nitrate test data
EC50 / LC50 freshwater algae >1700 mg/L - Sodium nitrate test data
EC10 / LC10 or NOEC :180 mg/L ; OECD 209 -Sodium nitrate test data
LC50 fish (freshwater): 447 mg/L (48 hours) -Calcium nitrate test data
EC50 freshwater algae >100 mg/L(72 hours) -Calcium nitrate test data

Crustaceans: EC50 Daphnia magna 555 mg / L Ammonium nitrate test data
Algae / aquatic plants: EC50 Scenedesmus quadricauda 83 mg / L- Ammonium nitrate test data
EC50/LC50 >1700 mg/L - Sodium nitrate test data

Other organisms : NOEC Bullia digitalis 300 mg/L (up to 7 days)-Ammonium nitrate test data
EC 10 (Pseudomonas putida) 8g/L (Akzo Nobel File E)- Sodium thiocyanate data

Chronic (long term) toxicity:
Fish : No data.
Crustaceans: NOEC/NOEL (Observed Effect Concentration/Observed Effect Level) value is expected to be > 0.1 - <= 1.0mg/l
Algae / aquatic plants: 10-d EC50 >1700 mg/L -sodium nitrate test data
Other organisms : Expected to be virtually non-toxic to bacteria:
LL/EL/IL50 > 100 mg/l
3-h EC50 >1000 mg/L; NOEC: 180 mg/L; OECD 209- Sodium nitrate test data

12.2 Persistence and degradability :

Abiotic Decay
There is no test data. However, since it is mostly composed of inorganic salts, it dissociates into ions in water.

Physical and photo-chemical elimination
No data available.

biodegradation
Easily biodegradable by itself

12.3 Bioaccumulative potential :

It contains components that are likely to bioaccumulate, albeit slightly. There is no test data.

Partition coefficient n-octanol / water (log Kow): No data available.

Bio-concentration factor (BCF): No data available.

12.4 Mobility in soil **:** No data available.

SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

Surface Tension	**:** No data available.
Clinging to the surface / separation from the surfa	**:** No data available.

12.5 Results of PBT and vPvB assessment

No test data are available for ammonium nitrate, sodium nitrate, calcium nitrate and wax.

Emulsifier: The substance/mixture does not contain components considered either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Ammonium nitrate is a nutrient for aquatic algae. When ammonium nitrate is poured into static waters, large algae blooms can result and affect the population balance of local species in the aquatic environment. In anaerobic soils, nitrate ions can be converted to nitrite, molecular nitrogen, nitrous oxide or ammonium ions.

12.7 Additional Info

No data available.

13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

First, apply it if it can be reused. The unusable, expired product should be considered as “explosive waste” and these wastes are the Production, Import, Transport, Storage, Storage, Sale, Use, Disposal of Explosives Excluded from Monopoly and Hunting Equipment and the like. It should be disposed of in accordance with the Regulation on Inspection Procedures and Principles and related regulations.

13.1.1 Product / Packaging disposal

The unusable, expired product should be considered as “explosive waste” and these wastes are the Production, Import, Transport, Storage, Storage, Sale, Use, Disposal of Explosives Excluded from Monopoly and Hunting Equipment and the like. It should be disposed of in accordance with the Regulation on Inspection Procedures and Principles and related regulations.

If the packaging of the product is clean (not contaminated with explosive or other dangerous substances (T.C.), it should be disposed of in accordance with the Regulation on Control of Packaging Wastes.

13.1.2 Waste treatment – relevant information

Clean product packaging can be recycled by licensed packaging waste buyer / recycling facility. Contact specialist disposal companies.

13.1.3 Disposal into sewers – relevant information

Prevent the product from entering the sewer system.

13.1.4 Other disposal recommendations

Product and packaging waste must be disposed of in accordance with the current (T.R.) Environmental Law and relevant Regulations. Consult an Environmental Consulting Firm or Environmental Officer for more information.

SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

14 TRANSPORT INFORMATION

14.1. UN Number :

UN No (ADR / RID / ADN) **: 0241**

Un No (IMDG) **: 0241**

Un No (IATA / ICAO) **: 0241**

14.2. UN proper shipping name :

Proper shipping name (ADR / RID / ADN): EXPLOSIVE, BLASTING, TYPE E (AGENT, BLASTING, TYPE E)

Proper shipping name (IMDG): EXPLOSIVE, BLASTING, TYPE E (AGENT, BLASTING, TYPE E)

Proper shipping name (IATA / ICAO): EXPLOSIVE, BLASTING, TYPE E (AGENT, BLASTING, TYPE E)

14.3. Transport hazards: Not applicable

ADR / RID / ADN hazard class **: 1.1D**
Class 1: Explosives and articles

ADR / RID / ADN hazard label **: 1.1D**

IMDG hazard class **: 1.1D**

IMDG hazard label **: 1.1D**

IATA / ICAO hazard class **: 1.1D**

IATA / ICAO hazard label **: 1.1D**

Transportation Label:

14.4. Packing group

ADR / RID / ADN packing group **:** Not applicable

IMDG packing group **:** Not applicable

IATA / ICAO packing group **:** Not applicable

SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

14.5. Environmental hazards

Not environmentally hazardous according to UN Model Regulations (IMDG Code, ADR, RID and ADN). Not a marine pollutant according to the IMDG Code.

14.6. Special precautions for user:

Special Provisions: Comply with the provisions of ADR 617

Limited and Exceptional Quantities: Comply with the provisions of ADR 0 and E0.

Packing Instructions: Comply with the provisions of ADR P116 and IBC100.

Special Packaging Provisions: Comply with the provisions of ADR no. PP61, PP62 and B10.

Mixed Packing Provisions: Comply with the provisions of ADR No. MP20.

Instructions for Portable Tanks and Bulk Containers: Not applicable

Special Provisions for Portable Tanks and Bulk Containers: Not applicable

ADR Tank code: Not applicable.

ADR Tank Special Provisions: Not applicable.

Tank Transport Vehicle: Not applicable

Comply with the provisions of ADR Transport Category (Tunnel Restriction Code): Not applicable

Special Provisions for Carriage: Not applicable

Packaged transport: Comply with the provisions of V2 and V12.

Bulk handling: Not applicable.

Loading, unloading and handling: Comply with the provisions of CV1, CV2 and CV3.

Operation: Comply with the provisions of S1.

Hazard identification number (ADR): Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

15 REGULATORY INFORMATION

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

Relevant legislation / regulations

- T.C. Ministry of Family, Labor and Social Services, Occupational Health and Safety Law No. 6331, dated June 30, 2012
- • T.C. Ministry of Environment and Urbanization, Environment Law dated 11 August 1983 and numbered 2872
- • T.C. Ministry of Environment and Urbanization, Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals dated 23 June 2017 and numbered 30105 (Repeated)
- • T.C. Ministry of Environment and Urbanization, Regulation on Classification, Labelling and Packaging of Substances and Mixtures, dated 11 December 2013 and numbered 28848 (Repeating)
- • T.C. Ministry of Environment and Urbanization, Waste Management Regulation dated April 2, 2015 and numbered 29314
- • T.C. Ministry of Environment and Urbanization, Packaging Waste Control Regulation dated 27 December 2017 and

SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

numbered 30283

- • T.C. Ministry of Family, Labor and Social Services, Regulation on the Use of Personal Protective Equipment at Workplaces dated 2 July 2013 and numbered 28695
- • T.C. Ministry of Family, Labor and Social Services, Regulation on Health and Safety Measures in Working with Chemicals, dated 12 August 2013 and numbered 28733
- • T.C. Ministry of Family, Labor and Social Services, Regulation on Health and Safety Measures in Working with Carcinogenic or Mutagenic Substances dated 6 August 2013 and numbered 28730

Usage permissions and/or restrictions

Permissions

This product requires Explosives Transport Permit, Explosives Purchase and Sales License, Explosives Storage Permit and Explosives Purchase and Use Permit.

Usage restrictions

It has no application.

Information on the restriction of emissions of volatile organic compounds

It has no application.

Occupation restrictions

This product can only be used by persons with a valid Explosive Substance Igniter Competence Certificate.

Other legislation / regulations, restrictions, and prohibition regulations

- T.R. Council of Ministers, Regulation No. 87/12028 on the Production, Import, Transportation, Storage, Storage, Sale, Use, Disposal, Inspection of Explosive Substances Excluded from Monopoly, Hunting Equipment and Similar Procedures and Principles
- T.R. Ministry of Science, Industry and Technology, Regulation No. 30159 dated 19 August 2017 on Certification, Market Placement and Inspection of Explosives for Civil Use
- T.C. Ministry of Transport, Maritime Affairs and Communications, Regulation on the Transport of Dangerous Goods by Road, dated October 24, 2013 and numbered 28801
- • T.C. Ministry of Transport, Maritime Affairs and Communications, Regulation on the Transport of Dangerous Goods by Rail, dated 16 July 2015 and numbered 29418
- • T.C. Ministry of Transport, Maritime Affairs and Communications, Regulation on Transport of Dangerous Goods by Sea, dated March 3, 2015 and numbered 29284.
- • T.C. Ministry of Transport, Maritime Affairs and Communications, Regulation on the Transport of Dangerous Goods by Air, dated April 13, 2018 and numbered 30390

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out by the supplier for this substance / mixture.

16 OTHER INFORMATION

16.1 Indication of the changes

SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

Not applicable

16.2 Abbreviations used in safety data sheet

ADR: European Agreement on the International Carriage of Dangerous Goods by Road
ADN: European Agreement on the International Transport of Dangerous Goods by Inland Waterways
RID: European Agreement Relating to the International Transport of Dangerous Goods by Rail
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods
TWA: Time weighted average
ATE: Estimated acute toxicity value
EC No: European Community number
CAS: Chemical Abstracts Service
LD50: 50% (half) dose of substance causing death in test animal group
LC50: 50% (half) death-causing substance concentration in the test animal group
EC50: Effective concentration of the substance causing 50% maximum response
PBT: Persistent, Bioaccumulative and Toxic
vPvB: Very Persistent, Very Bioaccumulative
SEA: Classification, Labeling, Packaging
BHOT: Specific Target Organ Toxicity
SDS: Safety Data Sheet
ECHA: European Chemicals Agency
BHOT Single Hazard:Specific Target Organ Toxicity Single Exposure
Skin Irrit.: Skin irritation
Eye Irrit.: Eye irritation
Cans.: Carcinogenicity
Aquatic Chronic: Long (chronic) term aquatic hazard
TWA: Time weighted average

16.3 Key literature references and sources of information

No data available.

16.4 SEA Classification for mixtures according to the SEA Regulation and the procedure used to achieve this classification

Classification according to SEA Regulation	Classification procedure
Explosive 1.1D -H205	According to the test information.
Skin sensitisation 2-H315	Based on the information provided by the raw material supplier. This information is confirmed from SEA Annex-6 and the European Chemicals Agency (according to ECHA) and is based on Annex-6 and ECHA information in case of conflict.

SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

Eye Damage 1- H318	Based on the information provided by the raw material supplier. This information is confirmed from SEA Annex-6 and the European Chemicals Agency (according to ECHA) and is based on Annex-6 and ECHA information in case of conflict.
STOT 3- H-335	Based on the information provided by the raw material supplier. This information is confirmed from SEA Annex-6 and the European Chemicals Agency (according to ECHA) and is based on Annex-6 and ECHA information in case of conflict.
Aquatic Chronic 3- H412	Based on the information provided by the raw material supplier. This information is confirmed from SEA Annex-6 and the European Chemicals Agency (according to ECHA) and is based on Annex-6 and ECHA information in case of conflict.

16.5 Relevant H-phrases (number and full text)

H201: Explosive; mass explosion hazard.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H335: May cause respiratory irritation.

H412: Harmful to aquatic life with long lasting effects

16.6 Training advice

General awareness and technical training is recommended for employees who will handle, transport and store this product.

16.7 Other Informations

Sources of information

This SDS has been prepared using the following sources:

- Information received from the owner of the product
- SDS provided by raw material suppliers
- ECHA - www.echa.europa.eu

Revision explanation

Revision Notes	Revision No
This SDS is published for the first time.	1

Prepared By

Osman Erdem

Chemical Assessment Specialist

SAFETY DATA SHEET
POWERMITE® MAX

It has been arranged in accordance with the provisions of the "Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals" published in the Official Gazette No. 30105 (Repeated) dated June 23, 2017.

Mobile: +90 537 921 5490

E-mail : osmanerdem@nitromak.com

Certificate Number: TÜV11.10.02

Certificate Validity Date: 06.02.2019 – 06.02.2024

Certificate Issuing Institution: TÜV AUSTRIA Personel Belgelendirme Eğitim Ltd. Şti.

For certificate validity check, visit https://www.tuvaustria.org/

Disclaimer

This SDS is based on the information and documents received from the product owner company. The SDS Preparer cannot be held responsible for the wrong arrangement of the SDS, which is prepared due to the incomplete or incorrect information and documents, and for the material damages and moral negativities that the product owner company may encounter.

Certificate information is used exclusively for this SDS. No changes can be made to this SDS or the certificate information cannot be used for another SDS without the knowledge and approval of the certificate owner. Otherwise, the certificate owner will not accept any responsibility for SDS.