Page 1 of 19



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR).

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

1.1. Product Identifier

Article Name : N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

CAS No : No data available.

EC No : No data available.

REACH Registration No : No data available.

According to the provisions of KKDİK, it is not necessary to provide a Safety Data Sheet for this article.

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Relevant Identified Uses : Industrial blasting applications (Mining, (without offshore industries) [SU2a] / Agriculture,

forestry, fishery [SU1] / Offshore industries [SU2b] / Building and construction work

[SU19] sector uses of Explosives [PC11]).

Uses Advised Against: It should not be used except for industrial blasting applications.

Reason Why Uses Advised Against: Explosive usage is dangerous, requires professional competencies & restricted by law.

1.3. Details of the Supplier of the Safety Data Sheet

Article Manufacturer : Nitromak Dnx Kimya Sanayii A.Ş.

Street Address / P.O. Box : Beştepe Mahallesi, Nergis Sokak No: 7/2-52 / Not applicable

Country ID / Postcode / Place : TR (TUR) / 45500 / 06510 / Yenimahalle / Ankara

 Telephone Number
 : +90 312 201 7742

 Telefax Number
 : +90 312 201 7702

E-mail Address of Competent Person Responsible for the SDS: fatihergan@nitromak.com

National Contact : Fatih Ergan

1.4. Emergency Telephone Number

Manufacturer : +90 312 201 7742

 $\begin{array}{lll} \textbf{Opening Hours} & : 08:00 - 17:30 \ (\text{GMT} + 03:00 \ / \ \text{Weekdays}) \\ \textbf{Opening Hours} & : 08:00 - 17:30 \ (\text{GMT} + 03:00 \ / \ \text{Weekdays}) \\ \end{array}$

Language(s) of the Phone Service : Turkish, English

Emergency Call Centre : 112 / Refer to the link below for your nation is a member of EU.

https://echa.europa.eu/documents/10162/2322249/emergency_phone_numbers_en.pdf/

d911af43-4bcf-9371-a59d-a20736d91e7d?t=1628515444598

National Poison Centre : Refer to the link below for your nation's telephone number.

https://apps.who.int/poisoncentres/PoisonCentres_201902.pdf

Page 2 of 19



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR ...).

2. SECTION: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Physical and Chemical Hazards: Explosive 1.4 – H204

Health Hazards : Acute Tox. 3 – H301

Acute Tox. 3 – H311 Acute Tox. 4 – H332 Canc. 1B – H350

Repro. Tox. 1A - H360Df

Lact. - H362

STOT Rep. Exp. 2 - H373

Environmental Hazards: Acute Aqua. 1 – H400

Acute Aqua. 1 – H410

2.2. Label Elements

Classification according to Regulation No 28848 [CLP] in Turkey (...).











Signal Word : Danger

Hazard Statements: H204 - Fire or projection hazard.

H301 - Toxic if swallowed. H311 - Toxic in contact with skin. H332 - Harmful if inhaled. H350 - May cause cancer.

H360Df - May damage the unborn child. Suspected of damaging fertility.

H362 - May harm a breastfed child. H400 - Very toxic to aquatic life.

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary Statements: P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P210 - Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P240 - Ground/bond container and receiving equipment. P250 - Do not subject to grinding/shock/pressure/friction. P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P263 - Avoid contact during pregnancy/while nursing.

Page **3** of **19**



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR).

P264 - Wash with soap and water thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P281 - Use personal protective equipment as required.

P301+310 - IF SWALLOWED: Immediately call NATIONAL POISON CENTER FROM 114 or doctor/physician.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P308+P313 - IF exposed or concerned: Get medical advice/attention.

P312 - Immediately call NATIONAL POISON CENTER FROM 114 or doctor/physician.

P314 - Get medical advice/attention if you feel unwell.

P321 - Specific treatment (see ... on this label).

P322 - Specific measures (see ... on this label).

P330 - Rinse mouth.

P361 - Remove/Take off immediately all contaminated clothing.

P363 - Wash contaminated clothing before reuse.

P370+380 - In case of fire: Evacuate area.

P372 - Explosion risk in case of fire.

P373 - DO NOT fight fire when fire reaches explosives.

P391 - Collect spillage.

P401 - Store in accordance with local/regional/national/international regulations (to be specified).

P405 - Store locked up.

P501 - Dispose of contents/container to in accordance with local/regional/national/international regulation (to be specified).

Supplemental Hazard Information: Not applicable

2.3 Other Hazards

The criteria for vPvB and PBT according to KKDİK (TR), Annex XIII:

PBT: No data available. vPvB: No data available.

3. SECTION: COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances: Not applicable.

3.2. Mixtures:

Substance Name	EC No EINECS No	CAS No	Weight % of Content	Hazard Class and Category	Hazard Statements	SCL / M- factor / ATE
Pentaerythrityl tetranitrate; P.E.T.N.	201-084-3	78-11-5	%1 – 95	Unst. Expl.	H200	No data available.
Octahydro-1,3,5,7-tetranitro- 1,3,5,7-tetrazocine (HMX)	220-260-0	2691-41-0	%1 – 95	Expl. 1.1 Acute Tox. 3 Acute Tox. 3	H201 H301 H311	No data available.
Lead azide	236-542-1	13424-46-9	%1- <10	Unst. Expl. Repr. 1A Acute Tox. 4 Acute Tox. 4 STOT RE 2 Aquatic Acute 1	H200 H360Df H302 H332 H373 H400	No data available.

Page 4 of 19



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR ...).

				Aquatic Chronic 1	H410	
Lead styphnate	239-290-0	15245-44-0	%1-<10	Unst. Expl. Repr. 1A Acute Tox. 4 Acute Tox. 4 STOT RE 2 Aquatic Acute 1 Aquatic Chronic 1	H200 H360Df H302 H332 H373 H400 H410	No data available.
Antimony	231-146-5	7440-36-0	%1- <10	No data available.	No data available.	No data available.
Lead chromate	231-846-0	7758-97-6	%1– <10	Carc. 1B Repr. 1A STOT RE 2 Aquatic Acute 1 Aquatic Chronic 1	H350 H360Df H373 H400 H410	No data available.
Aluminium	231-072-3	7429-90-5	%1-<10	Pyr. Sol. 1 Water-react. 2	H250 H261	No data available.
Orange lead	215-235-6	1314-41-6	%1-<10	Repr. 1A Acute Tox. 4 Acute Tox. 4 STOT RE 2 Aquatic Acute 1 Aquatic Chronic 1	H360Df H302 H332 H373 H400 H410	No data available.
Silicon	231-130-8	7440-21-3	%1-<10	No data available.	No data available.	No data available.
Lead	231-100-4	7439-92-1	%1-<10	Repr. 1A Lact.	H360FD H362	Repr. 1A; H360D: C≥%0,03
Iron	231-096-4	7439-89-6	%1-<10	No data available.	No data available.	No data available.
Copper	231-159-6	7440-50-8	%1-<10	No data available.	No data available.	No data available.

For full text of H-statements, see 16th Section.

About the composition

• The data are given in accordance with the latest Republic of Turkey (TR) and European Commission (EC) regulations.

Revision Date:

Issue Date : 05.04.2021

Version : 1 Form Number : 013

Page **5** of **19**



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR ...).

4. SECTION: FIRST AID MEASURES

4.1. Description of First Aid Measures

General Notes

Special precautions are not necessary.

Following Inhalation

Unlikely exposure. Provide fresh air; in case of complaints consult a doctor.

Following Ingestion

Unlikely exposure. Do not vomit; get medical help immediately.

Following Skin Contact

Unlikely exposure. Remove contaminated clothing. Wash skin immediately with soap and water. Consult doctor in case of skin irritation.

Following Eye Contact

Unlikely exposure. Remove any contact lenses. Flush with water for a few minutes keeping your eyes open. Consult a doctor if symptoms persist.

Self-protection of the First Aider

Where possible, and to prevent cross contamination, the first aider should wear protective gloves, CPR face shields, etc. Alcohol hand gels are ideal for cleaning hands where there is no water.

4.2. Most Important Symptoms and Effects, Both Acute and Delayed

Inhalation: Irritation of the upper respiratory system.

Ingestion: Nausea, vomiting.

Skin Contact: Prolonged contact may cause redness, irritation and drying of the skin.

Eye Contact: Irritation of the eyes and mucous membranes.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

No specific treatment is recommended. Treat according to symptoms.

5. SECTION: FIREFIGHTING MEASURES

5.1. Firefighting Equipment

Appropriate Extinguishing Media

Not applicable. DO NOT fight fire when fire reaches explosives.

Inappropriate Extinguishing Media

Not applicable. DO NOT fight fire when fire reaches explosives.

5.2. Special Hazards Arising from the Substance or Mixture

Unusual Fire and Explosion Hazards

DO NOT FIGHT FIRE FIRES INVOLVING EXPLOSIVES. Evacuate all personnel to a predetermined safe area that is at least 1.000 meters in all directions. In case of fire, it may detonate or explode.

Hazardous Combustion Products

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

Revision Date:

Version: 1 Issue Date : 05.04.2021 Form Number: 013

Page 6 of 19



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR (C)).

5.3. Advice for Firefighters

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 FIGHT FIRE FIRES INVOLVING EXPLOSIVES. Evacuate all personnel to a predetermined safe area.

Protective Equipment

Use self-contained respiratory protective equipment. Use full protective clothing.

6. SECTION: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

6.1.1 For non-emergency personnel

Protective Equipment

Not applicable.

Emergency Procedures

Not applicable.

6.1.2 For emergency responders

Remove people from hazardous areas. Provide adequate ventilation. Use protective clothing. Protect from heat. Clear the area. Isolate the area and block access.

Wear protective clothing as indicated in 8th Section of this Safety Data Sheet.

6.2. Environmental Precautions

Special precautions are not necessary.

6.3. Methods and Material for Containment and Cleaning Up

6.3.1 For containment

Not applicable.

6.3.2 For cleaning up

Protect from all sources of ignition. If there is no fire hazard and the product is undamaged and/or uncontaminated, collect the product mechanically and pack it in its original packaging or other approved clean container. Ensure a complete product count has been done and verified.

If explosive dust is spilled from parts such as a broken capsule, handling and cleaning should only be performed by suitably qualified and authorized personnel. Spilled explosive dust is extremely sensitive to ignition and may explode. Avoid sources of sparks. Notify local water and waste management authorities if contamination of sewers or waterways occurs. Put the waste in suitable containers and send it for recycling or disposal.

6.3.3 Other information

Dispose of unused material as waste within the scope of 13th Section.

6.4. Reference to other sections

See 7th Section for information on safe handling.

For personal protection, see 8th Section.

See 11th Section for additional information on health hazards.

See 13th Section for waste disposal.

Revision Date:

Issue Date : 05.04.2021 Form Number: 013

Page **7** of **19**

Version: 1



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR).

7. SECTION: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Handle carefully. Prevent shaking, friction and impact. 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, Including Any Incompatibilities

Requirements for storage rooms and vessels

Store in a cold environment. Do not store near excessive heat, sources of ignition or open flame.

Technical measures and storage conditions

Keep away from foodstuffs.

Further information on storage conditions

Store in tightly closed containers in cool, dry conditions. Keep away from heat.

7.3. Specific End Use(s)

Recommendations

No other additional information is available.

Industrial sector specific solutions

No other additional information is available.

8. SECTION: 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 Precautions in Working with Chemicals

No data available.

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

No data available.

Page **8** of **19**



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR).

8.1.1.3 Other occupational exposure limit values

		Substance Name	Expo	Special			
EC No CAS No	(8 hours)		(15 minutes)		Sign		
			mg/m³	ppm	mg/m³	ppm	
231-100-4	7439-92-1	Lead	0,15	-	-	-	Inhalation
231-072-3	7429-90-5	Aluminium	10	-	-	-	Inhalation
231-846-0	7758-97-6	Lead chromate	0,05				-
231-130-8	7440-21-3	Silicon	10	-	-	-	-
231-143-9	7440-33-7	Tungsten	5	-	10	-	-
231-146-5	7440-36-0	Antimony	0,5	-	-	-	-

8.2. Exposure Controls

8.2.1 Appropriate engineering controls

Substance / mixture related measures to prevent exposure during identified uses

Not applicable.

Structural measures to prevent exposure

Not applicable.

Organizational measures to prevent exposure

Not applicable.

Technical measures to prevent exposure

Not applicable.

8.2.2 Personal protection equipment

8.2.2.1 Eye / face protection

Use goggles that provide protection against mechanical hazards in accordance with EN 166 standard.



Page **9** of **19**



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR).

8.2.2.2 Skin protection

Hand protection

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



Other skin protection

Use protective clothing.



8.2.2.3 Respiratory protection

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

8.2.2.4 Thermal hazards

Not applicable.

8.2.3 Environmental Exposure Controls

Substance / mixture-related precautions to avoid exposure

Not applicable.

Instruction measures to prevent exposure

Not applicable.

Organisational measures to prevent exposure

Not applicable.

Technical measures to prevent exposure

Not applicable.

Page **10** of **19**



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR).

: Not applicable.

9. SECTION: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

Physical State : Solid.

Colour : May vary according to product specification.

Odour : Odourless. **Odour Threshold** : Not applicable. pH Value : Not applicable. **Melting / Freezing Point** : Not applicable. **Boiling / Initial Boiling Point and Boiling Range** : Not applicable. **Flash Point** : Not applicable. **Evaporation Rate** : Not applicable. Flammability (gases, liquids and solids) : Not applicable. **Lower and Upper Explosion Limit** : Not applicable.

Vapour Concentration: Not applicable.Relative Density: Not applicable

Solubility : Insoluble in water.

Partition Coefficient n-octanol/water (log value) : Not applicable.

Auto-ignition Temperature: No data available.Decomposition Temperature: No data available.Dynamic Viscosity: Not applicable.Kinematic Viscosity: Not applicable.

Explosive Properties: Heating may cause an explosion.

Oxidizing Properties : Not oxidizing.

9.2 Other information

Vapour Pressure

No additional information is available.

10. SECTION: STABILITY AND REACTIVITY

10.1 Reactivity

The product is stable under normal handling and storage conditions.

10.2 Chemical Stability

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

Revision Date :

Issue Date : 05.04.2021 Form Number : 013

Page **11** of **19**

Version: 1



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR ...).

10.3 Possibility of Hazardous Reactions

Explosion hazard. Toxic fumes may be released if heated above the decomposition temperature.

10.4 Conditions to Avoid

Do not store at temperatures above 50°C, heat, flame, sources of ignition, strong shock, electrostatic discharge.

10.5 Incompatible Materials

Not applicable.

10.6 Hazardous Decomposition Products

Possible traces of nitrous oxide compounds are formed.

11. SECTION: TOXICOLOGICAL INFORMATION

11.1 Information on Hazard Classes

Acute toxicity

No data available.

Skin corrosion / irritation

It is not a skin irritant in its unused form. Vapours / particles produced by the used product may irritate the skin.

Serious eye damage / irritation

In its unused form, it does not irritate the eyes. Vapours / particles produced by the used product may irritate the eyes.

Respiratory or skin sensitisation

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

It can cause cancer. It is classified as a known or presumed human carcinogen.

Reproductive toxicity

May harm fertility or the unborn child. It is classified as known or presumed to be human reproductive or developmental toxic. May harm a breastfed child.

STOT-single exposure

No data available.

Page **12** of **19**



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR).

STOT-repeated exposure

Kidney damage, anaemia, central nervous system damage and peripheral nervous system damage have been reported with prolonged exposure to lead.

Aspiration hazard

No data available.

12. SECTION: ECOLOGICAL INFORMATION

12.1 Toxicity

Acute (short-term) toxicity

Fish : No data available.

Crustacea : No data available.

Algae/aquatic plants : No data available.

Other organisms : No data available.

Chronic (long-term) toxicity

Fish : No data available.

Crustacea : No data available.

Algae/aquatic plants : No data available.

Other organisms : No data available.

12.2 Persistence and Degradability

Abiotic Degradation

No data available.

Physical- and photo-chemical elimination

No data available.

Biodegradation

No data available.

12.3 Bio-accumulative Potential

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

Bioconcentration factor (BCF) : No data available.

Page 13 of 19



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR).

12.4 Mobility in Soil

Known or predicted distribution to environmental compartments : No data available.

Surface tension : No data available.

Adsorption / Desorption : No data available.

12.5 Results of PBT and vPvB Assessment

No data available.

12.6 Endocrine Disrupting Properties

No data available.

12.7 Other Adverse Effects

No data available.

12.8 Additional Information

No data available.

13. SECTION: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

13.1.1 Product / Packaging disposal

The unusable, expired product should be considered as "explosive waste" and these wastes should be disposed of in accordance with the relevant national explosive regulation and other related regulations.

If the product packaging is clean (not contaminated with explosive or other dangerous substances), it should be disposed of in accordance with the regulation regarding packaging wastes.

Waste codes / waste designations according to LoW

Not applicable.

13.1.2 Waste treatment-relevant information

Clean product packaging can be recycled by licensed packaging waste buyer / recycling facility.

13.1.3 Sewage disposal-relevant information

Prevent the product from entering the sewer system.

Page **14** of **19**



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR ...).

13.1.4 Other disposal recommendations

Product and packaging waste must be disposed of in accordance with the current National Environmental Law and relevant Regulations. Consult an Environmental Consulting Firm or Environmental Specialist for more information.

14. SECTION: TRANSPORT INFORMATION

14.1. UN Number

 UN No (ADR / RID / ADN)
 : 0361

 Un No (IMDG)
 : 0361

 Un No (IATA / ICAO)
 : 0361

14.2. UN Proper Shipping Name

Proper Shipping Name (ADR / RID / ADN) : DETONATOR ASSEMBLY FOR NON-ELECTRIC EXPLOSION

Proper Shipping Name (IMDG) : DETONATOR ASSEMBLY FOR NON-ELECTRIC EXPLOSION

Proper Shipping Name (IATA / ICAO) : DETONATOR ASSEMBLY FOR NON-ELECTRIC EXPLOSION

14.3. Transport Hazard Class(es)

ADR / RID / ADN Hazard Class(es) : 1.4

ADR / RID / ADN Hazard Label(s) : 1.4B



IMDG Hazard Class(es) : 1.4 IMDG Hazard Label(s) : 1.4B



IATA / ICAO Hazard Class(es) : 1.4 IATA / ICAO Hazard Label(s) : 1.4B



Page **15** of **19**



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR ...).

14.4. Packing Group

ADR / RID / ADN Packing Group : Not applicable.

IMDG Packing Group : Not applicable.

IATA / ICAO Packing Group : Not applicable.

14.5. Environmental Hazards

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

14.6. Special Precautions for User

EmS : F-B, S-X

Emergency action code : No data available.

Hazard identification number (ADR) : No data available.

Tunnel restriction code : (E)

14.7. Maritime Transport in Bulk According to IMO Instruments

Not applicable.

15. SECTION: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations / Legislation Specific for the Substance or Mixture

National regulations

No data available.

Authorisations and/or restrictions on use

Authorisations

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

Page 16 of 19



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR).

Restrictions on use

Not applicable.

Other EU regulations

Not applicable.

Information according 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline) Not applicable.

Restrictions of occupation

This product can only be used by persons holding a valid Explosives Blaster Competence Certificate.

Other regulations, restrictions and prohibition regulations

No data available

15.2 Chemical Safety Assessment

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

16. SECTION: OTHER INFORMATION

16.1 Indication of Changes

Not applicable.

16.2 Abbreviations and Acronyms

ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

RID : Regulations concerning the International Carriage of Dangerous Goods by Rail

IATA: International Air Transport Association

ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air

IMDG: International Maritime Dangerous Goods

TWA : Time Weighted Average

ATE : Acute Toxicity Estimate

EC No : European Community Number

CAS : Chemical Abstracts Service

LD₅₀ : Lethal Dose to 50% of a test population (Median Lethal Dose)

LC₅₀ : Lethal Concentration to 50 % of a test population

EC50 : The concentration which induces a response halfway between the baseline and maximum after a specified exposure

time

Page 17 of 19



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR ...).

PBT : Persistent, Bio-accumulative and Toxic

vPvB : Very Persistent and Very Bio-accumulative

SEA : Classification Labelling Packaging Regulation

BHOT: Specific Target Organ Toxicity

GBF : Safety Data Sheet

ECHA: European Chemicals Agency

EmS: Ships Carrying Dangerous Goods including the Emergency Schedules

16.3 Key Literature References and Sources for Data

No data available.

16.4 Classification and Procedure Used to Derive the Classification for Mixtures According to the CLP Regulation

Classification According to CLP Regulation	Classification Procedure		
Explosive 1.4 – H204	On basis of test data		
Acute Tox. 3 – H301	Calculation method		
Acute Tox. 3 – H311	Calculation method		
Acute Tox. 4 – H332	Calculation method		
Canc. 1B – H350	Calculation method		
Repro. Tox. 1A – H360Df	Calculation method		
Lact H362	Calculation method		
STOT Rep. Exp. 2 – H373	Calculation method		
Acute Aqua. 1 – H400	Calculation method		
Acute Aqua. 1 – H410	Calculation method		

16.5 Relevant H-statements (Number and Full Text)

H200: Unstable Explosive.

H201: Explosive; mass explosion hazard.

H204: Fire or projection hazard.

H250 : Catches fire spontaneously if exposed to air.H261 : In contact with water releases flammable gases.

H301: Toxic if swallowed.

Page 18 of 19



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR ...).

H302: Harmful if swallowed.

H311: Toxic in contact with skin.

H331 : Toxic if inhaled.H332 : Harmful if inhaled.H350 : May cause cancer.

H360Df: May damage the unborn child. Suspected of damaging fertility.

H360FD: May damage fertility. May damage the unborn child.

H362: May cause harm to breast-fed children.

H373 : May cause damage to organs through prolonged or repeated exposure.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

16.6 Training Advice

It is recommended that employees who will handle, transport and store this product receive general awareness and technical training on Explosives.

16.7 Further Information

Information sources

This SDS has been issued using the following sources:

- Information received from the supplier company that produces, imports or distributes the chemical
- SDSs provided by raw material suppliers
- ECHA www.echa.europa.eu

Revision related explanation

This SDS has been authored for the first time.

SDS Author

Fatih Ergan

Chemical Assessment Specialist

Telephone Number: +90 530 971 3790 E-mail Address: fatihergan@nitromak.com

Certificate Number: TÜV/11.06.09

Certificate is valid between: 06.12.2018 - 06.12.2023

Certificate Issuing Authority: TÜV Austria Personnel Certification Training Co. Ltd.

Visit the web page of $\underline{\text{https://www.tuvaustria.org/}} \text{ to validate the certificate.}$

Page 19 of 19



SAFETY DATA SHEET N-DET MS/SD/LP/EZDET – Nonelectrical Detonator

It has been issued in accordance with the provisions of the "By- Law on Registration, Evaluation, Authorization and Restriction of Chemicals" (KKDİK) published in the Official Gazette dated 23 June 2017 and numbered 30105 (Repeated) in Republic of Turkey (TR ...).

Disclaimer

This SDS has been authored based on the information and documents received from this Supplier Company that produces, imports or distributes the relevant chemical. The SDS Author cannot be held responsible for the material and moral damages and losses that the Supplier Company or third parties may encounter due to the incomplete or incorrect preparation of this SDS which is based on these incomplete or inaccurate information and documents which the Supplier Company provided.

Certificate Information of the SDS Author has been stated specifically for this SDS. No changes can be made to this SDS or the Certificate Information of the SDS Author cannot be used for another SDS without the knowledge and written approval of the SDS Author. Otherwise, the SDS Author (Certificate Holder) will not accept any liability for the SDS and keep all reserved his legal rights, especially the right to compensation.