

Safety data sheet - product fire and technical characteristics

IGNITION DETONATOR No. 8 Al type II

1 Product and producer identification

1.1 Product identification

Business name: Ignition detonator No. 8 Al type II

1.2 Producer identification

Address: Sellier & Bellot a. s., Lidická 667, 258 13 Vlašim

Organization No.: 45147523

Tax ID No.: CZ45177523

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2 Information about product composition and packing

2.1 The ignition detonators No. 8 Al type II (hereinafter referred to as „detonators“ only) belongs to basic industrial igniters; they are ignited by a fuse flame or an electric detonators. The detonator includes an aluminum tube in which there is a secondary and a primary charge (explosive charge) pressed. The explosive charge is covered with an aluminum reinforcing cap with a centre hole. All this parts constitute a solid unit.

2.2 The detonators are packed in small metal boxes (consumer's package). 5 consumer's packages constitute a group package. The group package is inserted into transport packages of multiply cardboard that are in accordance with valid international regulations for transport of hazardous goods (ADR, RID, IATA-DGR, IMDG-Code, RTDG).

3 Risk assessment

Materials used in the charge production belong to deleterious substances and explosives. Since ignition detonators constitute a solid unit, there is no danger when users handle the detonator. No health impact was found as for correct handling. Dangerous defects are not supposable for the product. As for incorrect handling, e. g. due to brute mechanical damage of the set, accidental skin contact is possible with the charge, including explosion risk.

4 First-aid instructions

4.1 General instructions

Acute effect is not known as for common handling. When eyes are affected by detonator charges, always seek prompt medical attention, especially after ingestion of a large quantity. At all events it is necessary to ensure peace of body and mind and prevent from algidity.

4.2 Charge contact with the eyes

Rinse the eyes with mild flow of clear and possibly lukewarm water for 15 minutes at least.

4.3 Charge contact with the skin

Wash the affected place with a large quantity of clear water and/or with soap or other suitable agents. It is recommended to treat the skin with a reparation cream after washing.

4.4 Accidental ingestion of the charge

Rinse out the mouth with clear water, let the affected person drink about 0.5 l lukewarm water, however do not urge the person to vomit.

4.5 Other data

You can consult other first aid details with the Toxicological information centre (TIS):

*Klinika nemocí z povolání [Job-related Illness Clinic], Na Bojišti 1171/1, 128 21 Praha 2,
Telephone - 224 919 293, 224 915 402 nebo 224 914 575.*

5 Fire-fighting measures

5.1 Special hazard

During burning, toxic nitrogen, carbon and lead oxides can release. In case of fire, **mass explosion of detonators occurs - do not extinguish and evacuate the surrounding to safety (minimal 300 m).**

5.2 Suitable extinguishing agents

Water, foam, powder, CO₂ - **Do not extinguish if packaged detonators flame.**

5.3 Special protective equipment for firemen

Inflammable intervention clothing, isolation breathing apparatus - **Do not extinguish if packaged detonators flame.**

5.4 Fire-technical characteristics of materials

Charges: Temperature of ignition - 135 °C.

Transport packages (multiply board): during storage is necessary buckler the packages away from heat sources with temperature exceeding 100 °C, temperature of ignition - 427 °C.

6 Accidental leakage measures

6.1 Safety measures for personal protection

Do not permit persons to move freely in the leakage place. Prevent the spilt charge from contact with open fire, electric spars and chemically aggressive substances.

6.2 Safety measures for environmental protection

Prevent the composition from getting into the soil and water. Do not throw the detonators and their individual parts into the sewer system.

6.3 Recommended methods of cleaning and disposal

Sweep up the spilled compositions or the detonators and their parts besprent by water, carefully and place them into leakproof package as waste (this waste shall be considered hazardous waste and shall be handled as hazardous waste according to ADR, including the used package), do not throw up dust, ventilate the area. The waste shall be disposed at specified places in accordance with the applicable regulations. Use tools made of non-sparking materials.

7 Handling, storage, transport

7.1 Handling

The detonators shall be handled according to regulations for pyrotechnic products with which the users shall be familiar. There is no danger during common handling. Use nonsplintering glass goggles and work clothing. When handling the plain detonators, you are not allowed to eat, drink, smoke or use open fire. After working and especially before eating wash your hands with lukewarm water and soap, after washing treat your hands with a reparation cream. **Disassembly of detonators is prohibited.**

7.2 Storage

The detonators shall be stored in original packages in dry, clean and aired storage areas and shall be protected from the weather, ground humidity, radiant heat of heating bodies and direct sunlight. The air relative humidity in the storage rooms shall not exceed 80 %, the air temperature shall be from -5 °C to 35 °C. The detonators shall be stored so that the safety is kept according to valid regulations. The storage conditions shall correspond to the ČBÚ decree No. 99/1995 of Code and related valid regulations.

7.3 Transport

According to the applicable international regulations for transport of hazardous goods (ADR, RID, IATA-DGR, IMDG-Code, RTDG), the detonators are classified as class 1, classification code 1.1 B (safety sign No. 1.1), identification number UN 0029 and they shall be transported in the packages complying with the applicable requirements for the packing group II (Y). The detonators with the classification code 1.1 B are not allowed to be transported by air. The detonators are not allowed to be transported together with dangerous products of class 1, tolerance group D, if not otherwise specified (special permit by a corresponding authority).

8 Control of detrimental effects and personal protection

8.1 Technical measures

Local exhaustion, ventilation.

8.2 Personal protection

Hand protection - protective gloves.

Skin protection - work clothing, protective work shoes without pattern.

Eye protection - nonsplintering glass goggles.

Other data - when working do not eat, drink, smoke and/or use open fire, and keep principles of personal hygiene.

9 Stability and reactivity

9.1 Conditions under which the product is stable

The product is stable under normal conditions (pressure, temperature).

9.2 Conditions to avoid

Rough handling, effect of intense radiating heat, flame, mechanical or electrical sparks, effect of impact or friction.

9.3 Substances and materials with which the product must not be in contact

Chemically aggressive acid or alkaline substances.

9.4 Dangerous degradation products

During burning, toxic substance can release, e.g. nitrogen, carbon and lead oxides.

10 Toxicological information

There are not data at disposal.

11 Ecological information

There are not data at disposal.

12 Disposal information

12.1 Waste disposal methods

The detonators can be destroyed only by explosion in a specified surface place in accordance with valid safety regulations of ČBÚ and in the maximal quantity of 100 pieces.

12.2 Package disposal methods

The used uncontaminated packages are suitable for recycling as secondary raw material.

13 Legal provision information

Decree of Ministry of Interior (MV) No. 246/2001 of Code, on fire prevention, and related legal provisions.

Decree of Czech Mining Authority (ČBÚ) No. 72/1988 of Code, on using explosives, and related legal provisions.

Decree of Czech Mining Authority (ČBÚ) No. 99/1995 of Code, on storage of explosives, and related legal provisions.

14 Other information

The information given here is based on our current knowledge and experiences. The data describe the product in regard to safety and cannot be considered to be guaranteed values. The user is responsible for observance of valid laws and regulations when using our products.

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