



SAFETY DATA SHEET

Non-electric detonators with shock tube, Daveynel

SDS according to Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex II-EU

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Date issued 05.05.2015

1.1. Product identifier

Product name Non-electric detonators with shock tube, Daveynel
Synonyms DAVEYNEL detonators, DAVEYNEL surface delay connectors, non-electric detonators with shock tube (series 42000)
REACH Reg. No., Comments Explosive object.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/preparation Pyrotechnic initiation, industrial use.
The chemical can be used by the general public No

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name DAVEY BICKFORD SAS
Postal address le Moulin Gaspard
Postcode 89550
City Héry
Country France
Tel +33 3 86 47 30 00

Importer

Company name OY FORCIT AB
Postal address P.O.Box 19
Postcode 10901
City Hanko
Country Finland
Tel +358 (0)207 440 400
E-mail forcit@forcit.fi

1.4. Emergency telephone number

Emergency telephone National poison information center / National helpdesk:countrywise telephone number

SECTION 2: Hazards identification

2.1. Classification of substance or mixture

DSD/DPD Classification, Comments Not classified.
Pyrotechnic item with excess pressure effect (shock wave).
Classification notes CLP Not classified.
Pyrotechnic item with excess pressure effect (shock wave).

2.2. Label elements

Other Label Information None.

2.3. Other hazards

PBT / vPvB Not determined.

Other hazards Not applicable: the pyrotechnic material is not accessible.

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance additional information The item contains:

- An enclosing metal case with primary explosive < 0.5 g and/or secondary explosive < 1 g and/or retardant composition < 2 g.
- A shock tube of a variable length (kept in the case by a plastic plug placed at the open end of the case). This plastic tube contains a pyrotechnic composition (preparation containing octogen (HMX)).

SECTION 4: First aid measures

4.1. Description of first aid measures

General Protect yourself, notify emergency responders and take the victim to safety.

Inhalation Not determined.

Skin contact Not determined.

Eye contact Not determined.

Ingestion Not determined.

4.2. Most important symptoms and effects, both acute and delayed

General symptoms and effects Not relevant.

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

Other Information For injuries due to splinters, provide first aid then request medical advice if necessary.

In case of an explosion nearby, check hearing.

Treat symptoms in all cases.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media None.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards Set up a safe perimeter.

Do not personally intervene to stop a pyrotechnics fire.

Whenever possible, measures should be taken to prevent the fire from spreading.

After the fire has been extinguished, the site where it took place may only be entered after ascertaining that the entire area has completely cooled.

5.3. Advice for firefighters

Special protective equipment for firefighters When intervening, wear special fire prevention equipment (respiratory device, helmet, etc.).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Pyrotechnic materials spilled accidentally must be collected by authorised personnel in order to be disposed of and if necessary, destroyed (see waste handling, section 13).

Avoid any impacts, frictions or anything that may lead to a spark or electrostatic discharge.

Keep away from incompatible chemicals.

In case of breakage of a packaging of pyrotechnic items, transfer these items to a wood or cardboard container and avoid damaging them (impact, spark, heat, etc.).

6.2. Environmental precautions

Environmental precautionary measures Not determined.

6.3. Methods and material for containment and cleaning up

Cleaning method Not determined.

6.4. Reference to other sections

Other instructions Fire-fighting, see Section 5.
Personal protection, see Section 8.2.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling Handle with care, avoiding impacts, friction, and exposure to heat, open flame, electrostatic charges, etc. No smoking.
Any use except by trained personal as directed by technical instructions is prohibited.
Never handle/use damaged products. In case of products that are potentially or visually damaged, contact the seller or Davey Bickford to obtain the information necessary to process these products.

7.2. Conditions for safe storage, including any incompatibilities

Storage Protect from moisture. Storage temperature: -30°C to +50°C. National regulations must be followed with handling and storage.

7.3. Specific end use(s)

Specific use(s) See Section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Other Information about threshold limit values Not determined.

8.2. Exposure controls

Safety signs



Respiratory protection

Respiratory protection Do not breathe fumes after detonation.

Hand protection

Hand protection Protective gloves are recommended.

Eye / face protection

Eye protection Goggles/face shield are recommended.

Skin protection

Skin protection (except hands) No recommendation given.

Hygiene / Environmental

Specific hygiene measures When using do not eat, drink or smoke.

Appropriate environmental exposure control

Environmental exposure controls Not determined.

Other Information

Other Information

Hearing protection is recommended when close to a detonation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid.
Odour	Odourless.
Comments, Odour limit	Not determined.
Comments, pH (as supplied)	Not determined.
Comments, Melting point / melting range	Not determined.
Comments, Boiling point / boiling range	Not determined.
Comments, Flash point	Not determined.
Comments, Evaporation rate	Not determined.
Flammability (solid, gas)	Not determined.
Comments, Explosion limit	Not determined.
Comments, Vapour pressure	Not determined.
Comments, Vapour density	Not determined.
Comments, Specific gravity	Not determined.
Solubility description	Not determined.
Solubility in fat	Not determined.
Comments, Partition coefficient: n-octanol / water	Not determined.
Comments, Spontaneous combustability	Not determined.
Comments, Decomposition temperature	Not determined.
Comments, Viscosity	Not determined.
Oxidising properties	Not determined.

9.2. Other information

Other physical and chemical properties

Comments	Not determined.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Not determined.
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10.2. Chemical stability

Stability	Stable within the storage temperatures recommended in section 7 and within the item's usage limitations (expiration date).
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not determined.
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10.4. Conditions to avoid

Conditions to avoid	Avoid any exposure to high temperature, impact, friction or electrostatic discharge.
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10.5. Incompatible materials

Materials to avoid	Acids and alkalis.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Fumes contain lead. Possible release of carbon oxides and nitrogen oxides. (NO _x , CO, CO ₂)
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SECTION 11: Toxicological information

11.1. Information on toxicological effects**Toxicological Information:**

Other toxicological data No specific health warnings noted.

Acute toxicity, Mixture estimate

Assessment of acute toxicity classification Not determined.

Potential acute effects

Skin corrosion / irritation, other information Not determined.

Assessment eye damage or irritation, classification Not determined.

Delayed effects / repeated exposure

Inhalation Not determined.

Sensitisation Not determined.

STOT-single exposure Not determined.

STOT-repeated exposure Not determined.

Carcinogenic, Mutagenic or Reprotoxic

Carcinogenicity Not determined.

Teratogenic properties Not determined.

Reproductive toxicity Not determined.

Other adverse Toxicological effects Not determined.

Symptoms of Exposure

Other Information Not determined.

SECTION 12: Ecological information**12.1. Toxicity**

Ecotoxicity Not classified as dangerous to the environment.

12.2. Persistence and degradability

Persistence and degradability Not determined.

12.3. Bioaccumulative potential

Bioaccumulative potential Not determined.

12.4. Mobility in soil

Mobility Not determined.

12.5. Results of PBT and vPvB assessment

PBT assessment results Not determined.

12.6. Other adverse effects

Other adverse effects / Remarks Not determined.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Specify the appropriate methods of disposal Do not allow runoff to sewer, waterway or ground. Do not mix with normal waste.
Processing and destruction require specific procedures and must be covered in a special study that takes into account the product's condition and the handling of waste after destruction. This operation must be performed by trained and authorised personnel.
All materials contaminated by pyrotechnic materials from the item should also be considered pyrotechnic waste.
For any further information, please contact the seller or manufacturer.

Product classified as hazardous Yes

waste

SECTION 14: Transport information**14.1. UN number**

ADR	0360
RID	0360
IMDG	0360
ICAO/IATA	0360
Comments	Even UN number 0361 (1.4B) or 0500 (1.4S) can be used depending on the packaging.

14.2. UN proper shipping name

ADR	DETONATOR ASSEMBLIES, NON-ELECTRIC
RID	DETONATOR ASSEMBLIES, NON-ELECTRIC
IMDG	DETONATOR ASSEMBLIES, NON-ELECTRIC
ICAO/IATA	DETONATOR ASSEMBLIES, NON-ELECTRIC

14.3. Transport hazard class(es)

ADR	1.1B
RID	1.1B
IMDG	1.1B
ICAO/IATA	1.1B
Comments	Even hazard class 1.4B (UN number 0361) or 1.4S (UN number 0500) can be used.

14.4. Packing group

Comments	Not determined.
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14.5. Environmental hazards

Comments	Not determined.
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14.6. Special precautions for user

EmS	F-B, S-X
Special safety precautions for user	Not determined.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**Additional information.**

Additional information.	Not determined.
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SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Legislation and regulations	For all countries, the regulations and laws that cover the handling, transportation, storage, usage and destruction of explosives must be followed, as well as those governing the protection of workers, health and the environment.
Comments	For professional users only.

15.2. Chemical safety assessment

CSR required	No
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SECTION 16: Other information

Training advice	Training for handling and use of explosives and detonators.
Important data sources used to construct the safety data sheet	Material safety data sheet from the product manufacturer. REACH Directive (EC) 1907/2006 CLP Regulation (EC) 1272/2008
Version	1
Responsible for safety data sheet	OY FORCIT AB

Comments

The information in this MSDS is based on the present state of our knowledge. It does not represent any guarantee with regard to product properties or their suitability for particular uses. Because the use of this information and instructions or the conditions of use of the product is not at our control, it is the user's duty to specify the circumstances for the safe use of the product.