

# Material Safety Data sheet

## *Electric Detonator*

### 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<b>1-1 Product Identification :</b>	<b>ELECTRIC DETONATOR SERIE 4000</b> <b>Daveydet® DETONATOR</b>
<b>1-2 Product Use</b>	Pyrotechnic Initiation
<b>1-3 Company</b>	SNC DAVEY BICKFORD Le Moulin Gaspard 89 550 HERY FRANCE <a href="mailto:dir-usine@daveybickford.fr">dir-usine@daveybickford.fr</a>
<b>1-4 Emergency Call</b>	Tel : + 33 3 86 47 30 00 Fax : + 33 3 86 47 81 94 24 Hour Phone (France only) : ORFILA + 33 1 45 42 59 59 Other countries : according to local regulation.

### 2- RISK IDENTIFICATION

	<b>Explosive article</b>
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### 3- PHYSICAL DATA

	<p>Components used in the manufacturing of Davey Bickford electric detonators are:</p> <p>And / or            Primary explosives      2g max  And / or            Secondary explosives    2g max  And / or            Delay composition</p> <p>They are not directly in contact with users.  If case of accidental contact with one of those components, please contact immediately Davey Bickford to know how to handle those products.</p>
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### 4- FIRST AID

<b>4-1 General instructions</b>	Not applicable
<b>4-2 Inhalation</b>	Not applicable
<b>4-3 Contact with skin</b>	Not applicable
<b>4-4 Contact with Eyes</b>	Not applicable
<b>4-5 Ingestion</b>	Not applicable
<b>4-6 Other information</b>	Components are contained in a metallic shell. Do not put into a waste bin or dump.

### 5- FIRE FIGHTING MEASURES

<b>5-1 Extinguishing media</b>	- see § 5-5
<b>5-2 Prohibited extinguishing media</b>	- see § 5-5
<b>5-3 Hazards</b>	Can explode with variable effects according to the packaging – risk division 1.1 : risk of mass explosion; Risk division 1.4S no instantaneous mass explosion of a whole box.

<b>5-4 Special firefighting Equipment</b>	Upon intervention, use a mask with cartridge. WARNING the risk of explosion may remain latent even after the fire has stopped, depending on the condition of products.
<b>5-5 Other information</b>	In case of fire nearby the products : use extinguishers and all available watering means In case of fire in a warehouse or during transportation : do not fight fire but withdraw personnel immediately, up to the necessary safety distance. Evacuate the immediate perimeter of the fire and block accesses.

**6- SPILL OR LEAK PROCEDURES**

<b>6-1 Individual precautions</b>	Isolate the area
<b>6-2 Precautions for environment protection</b>	Not applicable
<b>6-3 Collection method</b>	Never handle damaged detonators. Undamaged detonators can be repacked in packagings similar to original boxes. Never use damaged products or partially damaged products (that have been shocked or submitted to excessive temperatures, etc.)
<b>6-4 Other information</b>	In case of potentially or visibly damaged products, contact immediately Davey Bickford to obtain the necessary information to handle those detonators.

**7- HANDLING AND STORAGE**

<b>7-1 Handling</b>	Handle with care, avoid all forms of commotion (impact and friction on products and their packagings, keep products and packagings away from heat, flames and sparks. Keep out of reach of children. The control and implementation of pyrotechnic articles must be done by authorized staff. Max current for ohmic control : 10 mA.
<b>7-2 Storage</b>	Storage temperature : -10°C +50°C Keep away from damp. Respect all regulations on the storage of hazardous goods. Do not store with other dangerous goods not being of Class 1, nor with incompatible goods of Class 1.
<b>7-3 Special use</b>	Not applicable

**8- SPECIAL PROTECTION INFORMATION / HEALTH HAZARD DATA**

<b>8-1 Threshold Limit Vaue</b>	Not applicable
<b>8-2 Control of exposure</b>	Not applicable
<b>8-3 Individual protection</b>	<ul style="list-style-type: none"> <li>- <b>Respiratory protection</b> : Avoid breathing fulmes from detonation.</li> <li>- <b>Protective gloves</b> : Not applicable</li> <li>- <b>Eye protection</b> : Not applicable</li> <li>- <b>Ear protection</b> : Use ear protectors if close to the detonation.</li> </ul>
<b>8-4 Other information</b>	

## 9- PHYSICO-CHEMICAL PROPERTIES

<b>Appearance</b>	Not applicable
<b>Odour</b>	Not applicable
<b>pH</b>	Not applicable
<b>Boiling point</b>	Not applicable
<b>Flash point</b>	Not applicable
<b>Flammable limits</b>	Not applicable
<b>Explosive properties</b>	Not applicable
<b>Propriétés comburantes</b>	Not applicable
<b>Vapor pressure</b>	Not applicable
<b>Density</b>	Not applicable
<b>Solubility</b>	Not applicable
<b>Solubility in water</b>	Not applicable
<b>Coeff of share n-octanol/water</b>	Not applicable
<b>Viscosity</b>	Not applicable
<b>vapor density</b>	Not applicable
<b>Evaporation rate</b>	Not applicable
<b>Other information</b>	Object made to detonate

## 10- STABILITY AND REACTIVITY

<b>10-1 Conditions to avoid</b>	Avoid any exposure to high temperature, to impact, friction and electrostatic discharges or stray currents.
<b>10-2 Materials to avoid</b>	Acids or alkalies. Dangerous goods outside Class1 and all incompatible materials of class 1.
<b>10-3 Hazardous Decomposition Products.</b>	Lead fumes and possibility of carbon monoxyde and nitrogen oxide fumes.

## 11- TOXICOLOGICAL INFORMATION

<b>Toxicinetics : metabolism and distribution</b>	Not applicable
<b>Acute effects, high toxicity, irritation, corrosive effects</b>	Not applicable
<b>Sensitization</b>	Not applicable
<b>Toxicity by repeted ingestion</b>	Not applicable
<b>CMR effects(carcinogenicity, mutagenicity, reprotoxicity)</b>	Not applicable
<b>Other information</b>	Object made to detonate

**12- ECOLOGICAL INFORMATION**

<b>Ecotoxicity</b>	Not applicable
<b>Mobility</b>	Not applicable
<b>Persistency et dwearing away</b>	Not applicable
<b>Bioaccumulation potential</b>	Not applicable
<b>Result of PBT evaluation</b>	Not applicable
<b>Other nocive effects</b>	Not applicable

**13- FACTORS CONCERNING WASTE ELIMINATION**

<b>Appropriate methods to dispose of substances/preparation/product</b>	See §6
<b>Appropriate method to dispose of packagings</b>	To be made on site per state and federal regulation, by authorized staff
<b>Other information</b>	-

**14- TRANSPORT INFORMATION**

<b>UN Number</b>	0030	0255	0456
<b>Exact name</b>	<b>Detonators, electric</b> for blasting	<b>Detonators, electric</b> for blasting	<b>Detonators, electric</b> for blasting
<b>Risk classification</b>	1.1 B	1.4 B	1.4 S
<b>Label</b>	1	1.4	1.4
<b>ADR (road) specificities</b>	none	none	none
<b>IATA (air) specificities</b>	Forbidden	Cargo aircraft only. Designation: <b>detonators, electric</b> for blasting	Cargo aircraft only. Designation: <b>detonators, electric</b> for blasting
<b>IMDG (sea) specificities</b>	none	none	none

**15- STATUTORY INFORMATION**

	Not applicable
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**16- OTHER DATA**

	For any specific requirement, please contact Davey Bickford
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**Disclaimer**

Present file in no way exempts users of the item in question from referring to the official texts, Federal, State and local regulations in order to ascertain all the obligations to which they are liable. The information contained in present datasheet is based on the state of our knowledge with regard to the item in question as of its date of edition. The present file is not exhaustive and only refers to normal use of the product in question.