# SAFETY DATA SHEET

**Product name:** DYNADET detonators (1.1B)  
**GDS no.:** 2342  
**Issue date:** 2002-01-22  
**According to EC-Directive 91/155/EEC**

## 1. Identification of the Substance/preparation and of the company / manufacturer

**Product-name:**
DYNADET detonators

**Usage:**
Detonators for initiating commercial explosives

**Manufacturer:**
ORICA Germany GmbH  
Kaiserstrasse  
D- 53840 TROISDORF

Phone: +49 (0) 2241 / 4829-1170  
Fax: +49 (0) 2241 / 4829-1511  
E-Mail: orica.germany@orica.com  
Emergency phone number: +49 (0) 2241 / 85-2333

## 2. Composition / information on ingredients

**Description:**
Detonators, electric, instantaneous and delayed.  
The articles consist of a metal case with a fuse head incl. leading wires, containing ~ 800 mg of different explosives.  
They are started by an electric impulse and serve for initiation of commercial explosives / blasting agents.  
Mass explosion hazard.

## 3. Hazards identification

**Possible dangers:**
Fire, heat, electrostatic or mechanical effects may cause the articles to explode, creating the potential for shrapnel.  
If detonators explode in the original package, the effects are substantially limited to the packaged items.  
If unpacked detonators are ignited, there is a danger of injuries due to shrapnel, shock wave or heat.  
With proper use and handling there is no health hazard.  
The intact detonators are also not hazardous to health.

## 4. First aid measures

**General references:**
In case of unintentional ignition usual first aid measures are to be applied for bruises, wounds and combustion  
Dexamethason-spray should be inhaled, if symptoms (irritation of respiration tract) are directly related to the inhalation of combustion fumes.
5. **Fire-fighting measures**

*Measures in case of fire:*

**Always:**
- Keep unauthorised persons away.
- Warn neighbourhood announcing risk of explosion.

**Fire has not yet reached product:**
- Fight adjacent fire with all available means (water, extinguishing powder etc.).
- Prevent fire from reaching product.
- Remove explosive articles from danger zone if possible.
- Drive vehicle away from fire zone.

**Fire has just reached the product or is about to reach it:**
- Do not try to extinguish, due to risk of explosion.
- Take cover in a distance of at least 300 m.

6. **Accidental release measures**

*People-related measures:*
- Secure vicinity, keep road users and unauthorised persons away and inform them about risk of explosion.

*Cleaning:*
- Scattered load is to be removed manually only, do not use any tools.

7. **Handling and storage**

*Handling*

**Information for safe handling:**
- Avoid mechanical influences (e.g. impact, crushing).
- Keep away from heat sources and naked flames.

**Appliance requirements:**
- Do not use spark-producing tools.

**Fire and explosion protection information:**
- Do not smoke.
- Keep away from ignition sources and open fire.
- Take measures to avoid electrostatic charges.
- Avoid mechanical influences (e.g. impact, crushing).

*Storage*

**Storage conditions and instructions:**
- Storage and holding at disposal only in approved buildings and in quantities according to the specific national regulations for articles containing explosives (Germany: BGV B 5 (VBG 55a). Also see German second regulation to Explosives Law (2. SprengV) and Explosives Storage Guidelines.

**Storage class / storage group:**
- 1.1 B

8. **Exposure controls / personal protection**

*Personal protective equipment*

**Eye protection:**
- Protective goggles (framed).

**Industrial hygiene:**
- Do not eat, drink, smoke when working.
- Keep away from food, drinks and animal feed.

9. **Physical and chemical properties**

See point 2.
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### 10. Stability and Reactivity

**Possible risks:**

Fire, heat, electrostatic or mechanical effects may cause the detonators to explode, creating the potential for shrapnel. If unpacked detonators are ignited, there is a danger of injuries due to fragments, shock wave or heat. Projection hazard.

### 11. Toxicological information

With proper use and handling there is no health hazard. The intact detonators are also not hazardous to health.

### 12. Ecological information

If handled and used appropriately adverse effects on ecosystems are unlikely.

### 13. Disposal considerations

**Recommended methods for disposal:**

Disposal or destruction of explosives and detonators must be carried out in accordance with national regulations for handling / disposal of explosives. German regulation: Work must be carried out according to BGV C 24 (VBG 46) “Sprengarbeiten” (blasting practice). If manufacturer is responsible for disposal, guidelines for destruction of explosive substances are to be applied. Also see German BG Chemie guideline no. BGR 114 (ZH1/47) resp. BGV 5 (VBG 55a).

### 14. Transport information

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<tr>
<th>ADR / RID - class</th>
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<td>Remarks</td>
<td>mass explosion hazard</td>
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</table>
### 15. Regulations

The article is not subject to the Council Directive 67/548/EEC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances. For that an EC Safety Data Sheet is not required.

**Labeling according to EC Directives**

**Trade name**

: DYNADET detonators

**German National Regulations**

Subject to German "Gefahrstoffverordnung" except sections two and three.
According to the German "Gefahrstoffverordnung" an EC Safety Data Sheet is not required.
Subject to German "Sprengstoffgesetz" (Explosives law).
Subject to regulations of the "Berufsgenossenschaft" (Chemical Professional Association).
Approval conditions must be respected.

### 16. Other information

Handling of explosives and explosive articles should only be allowed to qualified persons and in accordance with the specific national regulations.

**Responsible department for this Data sheet:**

Productdocumentation
Mr. Lang
Phone number +49 (0) 2241 / 4829-1170

This Safety Data Sheet is handed only in the form of a machine-written original document, any copies are not authorized.
The information contained is based on the present state of our knowledge.
It characterizes the product with regard to the appropriate safety precautions, but does not represent any guarantee with regard to product properties fixed by contract.
As being machine-written this Safety Data Sheet is not signed.