PRODUCT NAME: ECONOMIC SPECIAL ORDINARY DETONATORS

U.N. NO. : 0029
HAZCHEM : E

CLASS: 1.1B Explosives

IDENTIFICATION

CORRECT SHIPPING NAME:

PLAIN DETONATORS

INGREDIENTS:

Base charge of Pentaerythritol Tetranitrate (PETN) and a priming charge typically consisting of lead azide, lead styphnate and aluminium powder

CHEMICAL ENTITY

Aluminium Powder
Lead Azide
Lead Styphnate
Pentaerythritol Tetranitrate (PETN)

USES: Initiators for explosive charges.

PHYSICAL DESCRIPTION / PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Gravity (20 C)</td>
<td>N App</td>
</tr>
<tr>
<td>Rel Vapour Density (air=1)</td>
<td>N App</td>
</tr>
<tr>
<td>Vapour Pressure (20 C)</td>
<td>N App</td>
</tr>
<tr>
<td>Flash Point (C)</td>
<td>N App</td>
</tr>
<tr>
<td>Flammability Limits (%)</td>
<td>N App</td>
</tr>
<tr>
<td>Autoignition Temp (C)</td>
<td>N Av</td>
</tr>
<tr>
<td>% Volatile by Volume</td>
<td>Nil</td>
</tr>
<tr>
<td>Solubility in Water (g/L)</td>
<td>Nil</td>
</tr>
<tr>
<td>Decomposition Point (C)</td>
<td>N.App</td>
</tr>
<tr>
<td>Sublimation Point</td>
<td>N App</td>
</tr>
<tr>
<td>pH</td>
<td>N App</td>
</tr>
<tr>
<td>Viscosity</td>
<td>N App</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N App</td>
</tr>
</tbody>
</table>

(Types Values only – Consult specification sheet)

N Av : Not Available
N App : Not Applicable
PRODUCT NAME: ECONOMIC SPECIAL ORDINARY DETONATORS

(Typical Values only – Consult specification sheet)

N App : Not Applicable

Appearance, Odour : Metal Tubes, closed at one end open at the other end.

Solubility : Insoluble in water

Reactivity : Detonation can occur from impact, friction or excessive heating

Shelf life : To be used within one year of date of manufacture.
Temp. Range : To be used between -5°C to 50°C

HEALTH HAZARD INFORMATION

HEALTH EFFECTS

ACUTE EFFECTS

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms that may arise if the product is mishandled are:

SW ALLOWED : Not applicable

EYE : Not applicable

SKIN : Not irritating to the skin.

FIRST-AID

The packaging of these materials normally prevents any significant contamination with the charge.

SW ALLOWED : Not applicable

EYE : Not applicable

INHALATION : Remove victim from exposure. Seek medical advice if effects persist.
PRODUCT NAME : ECONOMIC SPECIAL ORDINARY DETONATORS

ADVICE TO DOCTOR : Treat symptomatically.

TOXICITY

No. LD50 data available for product.

Long terms exposure to low concentrations of lead may result in altered haemoglobin breakdown, kidney damage, anaemia and central and peripheral nervous system damage (1)

PRECAUTIONS FOR USE

EXPOSURE STANDARDS

No value assigned for this specific material by the local Regulatory Bodies.

However, Exposure Standard for a product of detonation : 

TWA
ppm mg/m3
Lead, inorganic dusts - 0.15
and fumes (as Pb)

ENGINEERING CONTROLS : When test firing, ensure ventilation is adequate to maintain air concentrations below exposure standard.

PERSONAL PROTECTION : No specific safety equipment necessary.

FLAMMABILITY : Explosive material. Avoid all ignition sources.
PRODUCT NAME: ECONOMIC SPECIAL ORDINARY DETONATORS

SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT
UN NO:0029. Classified as a 1.1B (Explosive). Dangerous substance for the purpose of transport. Refer to relevant regulations for storage and transport requirements.

Explosives should not normally be carried on the same vehicle with dangerous goods of other classes, however exemptions may apply. Store in a clean, dry magazine suitably licenced for IMCO Class 1.1B explosives. Handle with care. Do not subject materials to impact, sparks or any form of heating.

SPILLS: Shut off all possible sources of ignition. Collect and seal in labelled containers. In the case of a transport accident notify the state police, State Explosive Inspector and Economic Explosives Limited.

DISPOSAL: For small quantities: Place in a blast hole and explode during blasting. Large quantities to be disposed off in conjunction with the relevant State Dangerous Goods Branch & Economic Explosives Limited.

FIRE / EXPLOSION HAZARDS: Explosive. Severe detonation hazard when exposed to heat. In case of small fire where the actual detonators are not involved and are remote from fire, carefully remove the detonators to a safe distance.

Where explosives are involved in fire evacuate area immediately and allow fire to burn, DO NOT attempt to fight fire. Toxic fumes containing lead will be produced.

OTHER INFORMATION & REFERENCES
The SAFETY DATA SHEET summarizes at the date of issue our best knowledge of health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since EEL cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SAFETY DATA SHEET in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact Economic Explosives Limited.