SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT DESCRIPTION : LEAD BIS (2-ETHYLHEXANOATE) IN LOW AROMATIC WHITE SPIRITS

SYNONYMS : Lead Octoate, Lead 2-ethyl hexanoate

PRODUCT TRADE NAME : COMMET : Pb-36 E/LA

INTENDED USE : Paint Drier

COMPANY IDENTIFICATION : COMAR Chemicals (Pty) Ltd
Neil Hare Road
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EMERGENCY TELEPHONE NUMBER : +27-827740071 / +27 21 5771333/ +27 825774766

SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components :

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>EINECS No.</th>
<th>Concentration (% m/m)</th>
<th>Symbol, Risk Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead bis (2-ethylhexanoate)</td>
<td>15696-43-2</td>
<td>239-790-9</td>
<td>80</td>
<td>Xn, R22, R43, R33, R61</td>
</tr>
<tr>
<td>Medium aliphatic Petroleum solvent</td>
<td>64742-88-7</td>
<td>649-405-00</td>
<td>20</td>
<td>Xn, R65</td>
</tr>
</tbody>
</table>

Composition comments : Lead Carboxylate of metal concentration 36% m/m.

SECTION 3. HAZARD IDENTIFICATION

Classification : T, Xn , R22, R43, R20/21/22, R36/37, R65, R33, R61

- Toxic
- Harmful
- Harmful if swallowed
- May cause both dermal and respiratory sensitization.
- Harmful by inhalation, in contact with skin and if swallowed
- Irritating to the eyes and respiratory system
- Harmful: may cause lung damage if swallowed
- Danger of cumulative effects
- Can affect unborn foetuses
SECTION 4. FIRST AID MEASURES

- **AFTER INHALATION**
  Assistants must be equipped with breathing apparatus. In case of poisoning, the affected person must be removed out of the contaminated area and artificial respiration be applied. In case of breathing difficulties, the Patient must be kept calm, and medical assistance must be obtained.

- **AFTER SKIN CONTACT**
  Remove clothing and wash affected areas thoroughly with water and soap.

- **AFTER EYE CONTACT**
  Rinse thoroughly with water until irritation stops. If irritation continues, consult a Doctor.

- **AFTER INGESTION**
  Keep affected person calm, and call a Doctor. Do not induce vomiting.

SECTION 5. FIRE FIGHTING MEASURES

- **APPROPRIATE EXTINGUISHING MEDIA**:
  Powder, Foam, sand, or CO

- **UNSAFE SUBSTANCES / METHODS OF EXTINGUISHING**:
  Avoid direct water-jet

- **FIRE-FIGHTING INSTRUCTIONS**:
  Wear self-contained breathing apparatus and standard protective equipment

- **HAZARD COMBUSTION PRODUCTS**:
  Metal oxides and/or Carbon oxides may be released

SECTION 6. ACCIDENTAL RELEASE MEASURES

- **PRECAUTIONARY SAFETY MEASURES**:
  Remove sources of ignition. Ground containers. Ensure sufficient ventilation, or provide respiratory protection. Protect eyes and skin.

- **ENVIRONMENTAL MEASURES**:
  Inform relevant local authorities. Inform inhabitants of areas that will be affected by possible fire / explosion.

- **CLEANING UP AND SPILLAGE REMOVAL**:
  Do not allow ingress into ground or surface water, or drainage systems.
  Fill into containers and dispose at toxic waste disposal sites.
  Local regulations must be observed.

SECTION 7. HANDLING AND STORAGE

- **SAFE HANDLING AND PRECAUTIONS**:
  Do not smoke. Remove sources of ignition. Avoid contact with skin, eyes and clothing. Handle material in adequately ventilated areas. Ensure proper use of recommended safety apparel. Do not use compressed air or compressed oxygen for transfer of product. Partially used drums must be securely closed after use.

- **STORAGE**:
  Store in a cool, dry and ventilated area. Keep away from incompatible materials such as oxidising agents. Ensure material is kept in a closed container. Keep away from ignition sources.
SECTION 8.  EXPOSURE CONTROL / PERSONAL PROTECTION

- EXPOSURE LIMITS :

  **Lead** :
  Dust and fumes of Lead :
  
  ACGIH : Lead[7439-92-1], inorg. dusts & fumes, as Pb : TLV-TWA 0.15 mg/m³ (1986), intended change 0.05 mg/m³

  BEI(ACGIH 1993) : Lead in blood : 50 micro g/100 ml. Lead in urin : 150 micro g/g creatinine. MAK : Lead[7439-92-1] : 0.1 mg/m³ Sp. Cat. measured as total dust. BAT (DFG) : Lead 700 micro g/l 300 micro g/l (women < 45 J.)

  **Medium aliphatic (petroleum) hydrocarbon (white spirits)** :
  
  Biological Exposure Index: ACGIH : TLV-TWA : 100 ppm 525 mg/m³.

- PERSONAL PROTECTIVE EQUIPMENT :

  - Inhalation : Approved Dust Respirator recommended.
  - Skin Contact : PVC/rubber gloves (impervious)
  - Eye Contact : Full-cover goggles recommended

General Hygiene and Protective measures :
Keep away from food. Wash hands thoroughly with water and soap before breaks and at the end of a work day. Provide separate storage of work clothes and private clothes.

- Do not allow material to be released into the environment.

SECTION 9.  PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Yellow / Pale straw</td>
</tr>
<tr>
<td>Odour</td>
<td>slight oil/alcohol smell</td>
</tr>
<tr>
<td>pH</td>
<td>not measurable</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>&gt;140 °C</td>
</tr>
<tr>
<td>Solidification temperature</td>
<td>&lt; -20 °C</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 35 °C (as per ASTM D 93)</td>
</tr>
<tr>
<td>Density</td>
<td>1400 kg/m³ (as per ASTM D 1298)</td>
</tr>
</tbody>
</table>

**SOLVENT** :

- Boiling point/range : >140 °C
- Explosive limits : approx 0.6 % to 6.5 % vol/vol
- Vapour pressure : < 10 hPa
- Solubility : soluble in organic solvents such as white spirits, xylol, alcohol, glycol
SECTION 10.  STABILITY AND REACTIVITY

- **STABILITY :**
  Material is stable under normal conditions.

- **CONDITIONS TO AVOID :**
  Avoid areas of ignition sources or open flames

- **MATERIALS TO AVOID :**
  Avoid strong oxidisers, inorganic acids, organic peroxides

- **HAZARDOUS DECOMPOSITION PRODUCTS :**
  Metal oxides and carbon oxides. At pyrolysis temperatures in excess of 1000°C possible formation of Metal oxides, CO, CO2, and vapours of acid decomposition.

SECTION 11.  TOXICOLOGICAL INFORMATION

- **Lead :**
  LD50 Acute : 74mg/kg (mouse)
  Acute : 93mg/kg (rat)

  - Carcinogen

  - Evidence of mutagenic effects in experimental animals

  - Exposure routes by inhalation or skin : May cause both dermal and respiratory sensitization.

  - No data is available for reproductive toxicity

- **White Spirits :** (Rabbits) LD50: > 2000mg/kg for acute dermal toxicity. Practically non-toxic.

SECTION 12.  ECOLOGICAL INFORMATION

- **ECOTOXICITY :**
  No data available.

- **MOBILITY :**
  No data available

- **PERSISTENCE AND DEGRADABILITY :**
  No data available

SECTION 13.  DISPOSAL CONSIDERATIONS

- **REGULATORY DISPOSAL INFORMATION**

  **EUROPEAN WASTE CODE :** 07 :Wastes from Organic Chemical Processes


  - **RESIDUAL WASTES AND EMPTY CONTAINERS :**
    Disposal must be in accordance with local applicable laws and regulations.
SECTION 14. TRANSPORT INFORMATION

- **LAND & INLAND WATERWAYS (ADR/RID/ADNR)** :
  
  | UN No | 1263 |
  | Product Shipping Name | Paint related material (Lead Octoate) |
  | Class | 3 |
  | Letter | F |
  | Packing Group | III |
  | Labelling number | 3 |

- **SEA (IMDG)** :
  
  | UN No | 1263 |
  | Product Shipping Name | Paint related material (Lead Octoate) |
  | Class | 3 |
  | Letter | F |
  | Packing Group | III |
  | Labelling number | 3 |
  | Marine pollutant | Yes |
  | MFAG | 311 |

- **AIR (IATA)** :
  
  | UN No | 1993 |
  | Product Shipping Name | Flammable liquid nos* (Lead Octoate) |
  | Class | 3 |
  | Letter | F |
  | Packing Group | III |
  | Labelling number | 3 |

SECTION 15. REGULATORY INFORMATION

Material is Dangerous as defined by the EU Substance/Preparations Directive

CLASSIFICATION : Flammable, Harmful, Irritant, Toxic

SYMBOLOm : FLAMMABLE, HARMFUL, TOXIC, IRRITANT

- **NATURE OF SPECIAL RISK** :
  
  - R22 - Harmful if swallowed
  - R43 - May cause sensitization by skin contact
  - R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed
  - R33 - Danger of cumulative effects
  - R 36/37 - Irritating to the eyes and respiratory system
  - R 61 - Can affect unborn foetuses
  - R 65 - Harmful: may cause lung damage if swallowed

- **SAFETY ADVISE** :
  
  - S24 - Avoid contact with skin
  - S28 - In case of skin contact, wash immediately with water and soap
  - S36/37 - Wear suitable protective gloves and overalls when handling product

- **CONTAINS** : Lead bis(2-ethylhexanoate) in Low aromatic white spirits

- **REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS** : EINECS
SECTION 16. OTHER INFORMATION

- KEY TO THE RISK PHRASES IN SECTION 2 AND 3:

R22 - Harmful if swallowed
R43 - May cause sensitization by skin contact
R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed
R33 - Danger of cumulative effects
R 36/37 - Irritating to the eyes and respiratory system
R 61 - Can affect unborn foetuses
R 65 - Harmful: may cause lung damage if swallowed

- REVISED INFORMATION:
Revision incorporates product density.

The information and recommendations contained herein are believed to be accurate and reliable at the time of issue. It is however the user’s responsibility to satisfy itself that the product is suitable for the intended use. No warranties, either implied or expressed, shall be extended as to the accuracy or completeness of the information contained herein, and we assume no responsibility regarding the suitability of the information for the user’s intended purposes or for the consequences of its use.