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

Trade name: Methomex 900 SP
Chemical formula: C5H10N2O2S
Relevant identified uses: Insecticide
Company identification: ADAMA SOUTH AFRICA (PTY) LTD
21 Viben Street
Brackenfell 7560
Phone nr: +27 82 331 6463
+27 21 982 1460

SECTION 2. Hazards identification

Physical/Chemical Hazards: Prevent heating of material.
Dust explosion hazards.
Dust forms explosive mixture with air.
Will ignite if exposed to intense heat or fire
Human health hazards: Toxic by inhalation.
Very toxic if swallowed.
Environmental hazard: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 3. Composition/information on ingredients

Components: This product is considered to be hazardous and contains hazardous components.
<table>
<thead>
<tr>
<th>Substance name</th>
<th>Concentration % w/w</th>
<th>CAS No</th>
<th>EC No</th>
<th>Index No</th>
<th>REACH Reg.</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methomyl (ISO)</td>
<td>90 %</td>
<td>16752-77-5</td>
<td>240-815-0</td>
<td>006-045-00-2</td>
<td>---</td>
<td>T+; R28 N; R50-53 (M fact. = 100)</td>
</tr>
</tbody>
</table>

SECTION 4. First aid measures

First aid measures
Inhalation: Remove victim to fresh air. Keep victim warm and at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediately get medical attention.
Skin contact: Remove contaminated clothing. Wash off with plenty of water and soap. Get medical attention.
Eye contact: Wash off with plenty of water for at least 15 minutes. Consult an eye specialist.
Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Wash out mouth with plenty of water. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediately get medical attention.
Ingestion: May result in systemic poisoning.
Note to physician: Antidote: Atropine sulfate. Suggest serum and/or RBC cholinesterase determination.

SECTION 5. Fire-fighting measures

Suitable extinguishing media: water spray, dry chemical, or alcohol resistant foam, carbon dioxide.
Specific hazards: sulfur oxide, nitrogen oxides, carbon monoxide, carbon dioxide, and methyl isocyanate.
Thermal decomposition may generate: HCN, CH3NCO, CS2.
Protection against fire: Wear suitable protective clothing. Self-contained breathing apparatus.
Special procedures: Keep container cool by spraying with water.
Dike fire control water for later disposal.
Fight fires from a protected location; use extreme caution as heat may decompose material and rupture containers.
SECTION 5. Fire-fighting measures (continued)

Prevention: Will Ignite if exposed to intense heat or open flame.
Dust forms explosive mixture with air.

SECTION 6. Accidental release measures

For emergency responders: Use appropriate protection (see section 8).
Environmental precautions: Dispose of this material and its container at hazardous or special waste collection point in accordance with national and regional regulations. If the product has contaminated surface water, inform the appropriate authorities.
Clean up methods: Collect spilled material with shovel, place into a clean container and cover container loosely. Wash away remainder with plenty of water.

SECTION 7. Handling and storage

Handling: Do not breathe dust. Avoid contact with skin and eyes. Dust explosion hazards: During the routine handling of this material there should be little risk of a dust explosion. There are indications that an explosive dust mixture can develop. Therefore, appropriate prevention measures should be taken. If a large dust cloud develops, turn off any device that may cause spark and leave the area until the cloud dissipates.

Storage: Avoid all unnecessary exposure.
Keep locked up. Keep container tightly closed. Keep only in the original container in a cool, well ventilated place. Keep container dry.
Keep away from heat, sparks, flame, strong bases.
Avoid generation of dust. Avoid all possible sources of ignition (spark or flame). Avoid friction, impact or electricity.
Packing: Fiber drums.
PVA bags in laminate bags.

SECTION 8. Exposure controls/personal protection

TLV®: (USA) Methomyl: 2.5 mg/m3, A4 (1996)
Ventilation required. Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower. Wash hands thoroughly after handling. Wash clothing separately before re-use.

- Respiratory protection: During spraying wear suitable respiratory equipment.
- Hand protection: Wear suitable gloves.
- Skin protection: Wear protective clothing.
- Eye protection: Safety goggles or face shield.

SECTION 9. Physical and chemical properties

Physical state at 20 °C: Solid.
Colour: Blue.
Odour: Slightly sulfuric.
Melting point [°C]: Methomyl: 75 - 78
Final boiling point [°C]: Not applicable.
Flash point [°C]: Not applicable.
Flammability: Flammable limits in Air, % by Volume LEL: 0.096 g/L
Vapour pressure mm/Hg: 5 - 6.5 x (10)-5 (25°C - pure)
Specific gravity: 1.2946 (25 °C)
**SECTION 9. Physical and chemical properties (continued)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk density [kg/m³]</td>
<td>480.6 - 608.7 loose</td>
</tr>
<tr>
<td></td>
<td>592.7 - 688.8 packed</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>5.8 g/100ml (25°C - Pure)</td>
</tr>
<tr>
<td>Log P octanol / water at 20°C</td>
<td>1.24</td>
</tr>
<tr>
<td>Decomposition point [°C]</td>
<td>136</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>May be explosive after prolonged heating above 75°C</td>
</tr>
</tbody>
</table>

**SECTION 10. Stability and reactivity**

- **Chemical stability**: Stable under normal conditions. Decomposes at elevated temperatures.
- **Hazardous decomposition products**: Thermal decomposition generates: carbon dioxide, carbon monoxide, nitrogen oxides, sulfur oxide, methyl isocyanate, CS₂, HCN.
- **Hazardous polymerization**: Will not occur.
- **Conditions to avoid**: Protect from sunlight and excessive heat. Avoid temperatures above 75°C.

**SECTION 11. Toxicological information**

- **Toxicity information**: Toxicological information is known for the product METHOMEX TECHNICAL:
  - Rat oral LD₅₀ [mg/kg]: 24
  - LD₅₀ Rabbit dermal [mg/kg]: > 2000
  - Rat inhalation LC₅₀ [mg/l/4h]: 0.272
- **Dermal irritation (rabbit)**: Not irritant
- **Eyes irritation (rabbit)**: Not irritant
- **Sensitization**: Guinea pig maximization test: Non sensitizer
- **Mutagenicity**: Not mutagenic
- **Carcinogenicity**: Not carcinogenic
- **Toxic for reproduction**: Not teratogenic in animal experiments

**SECTION 12. Ecological information**

- **Ecological effects information**: The data below are for Active ingredient:
  - LC₅₀ - fish [mg/l]: 3.4
  - EC₅₀ - Daphnia [µg/l]: 28.7
  - LD₅₀ Birds [mg/kg]: 15.9 (Mallard duck)
  - Bees LD₅₀ [µg]: Toxic to bees
  - **Persistence - degradability**: The product is rapidly degraded in soil and ground water.
  - **Bioaccumulative potential**: Methomyl Does not bioaccumulate in aquatic organisms.

**SECTION 13. Disposal considerations**

- **General**: Disposal according to the local legislation.
Methomex 900 SP

SECTION 14. Transport information

UN No : 2757
Proper shipping name : CARBAMATE PESTICIDE, SOLID, TOXIC (METHOMYL)
- H.I. no : 60
ADR - Class : 6.1
ADR - Group : II
- IMDG-Marine pollution : Marine pollutant - Polluant marin

SECTION 15. Regulatory information

EU Classification : This product is provisionally labelled by the supplier in accordance to the EU regulations:
Symbol(s) : T+: T+ : Very toxic
N: N : Dangerous for the environment.
R Phrase(s) : R23 - Toxic by inhalation.
R28 - Very toxic if swallowed.
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S Phrase(s) : S20/21 - When using, do not eat, drink or smoke.
S22 - Do not breathe dust.
S36/37 - Wear suitable protective clothing and gloves.
S38 - In case of insufficient ventilation, wear suitable respiratory equipment.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).
S60 - This material and its container must be disposed of as hazardous waste.
S61 - Avoid release to the environment. Refer to special instructions/Safety data sheets.

SECTION 16. Other information

List of relevant R phrases (heading 3) : R28 - Very toxic if swallowed.
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Print date : 27 / 5 / 2014
Recommended uses and restrictions : None.
Prevent heating of material
Dust explosion hazards

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