ELMER’S SPRAY ADHESIVE

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Elmer’s Spray Adhesive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code</td>
<td></td>
</tr>
<tr>
<td>Other Names</td>
<td>E-451, E-452, 60451 (Aerosols), 0366940, 0366950</td>
</tr>
<tr>
<td>Product Use</td>
<td>Rubber based adhesives</td>
</tr>
<tr>
<td>Company Name</td>
<td>ACCO Brands Australia</td>
</tr>
<tr>
<td>Address</td>
<td>2 Coronation Avenue</td>
</tr>
<tr>
<td></td>
<td>Kings Park NSW 2148</td>
</tr>
<tr>
<td>Telephone Number</td>
<td>02 9674 0900</td>
</tr>
<tr>
<td>Emergency Telephone</td>
<td>Poisons Information Centre: 13 11 26</td>
</tr>
</tbody>
</table>

2. HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE. DANGEROUS GOODS.
Classified as hazardous according to the criteria of Safe Work Australia.

| Hazards                  | F+ - Extremely Flammable                  |
|                         | Xn - Harmful                              |
| Risk Phrases            | R12 - Extremely flammable.                |
|                         | R36 - Irritating to eyes.                 |
|                         | R51/53 - Toxic to aquatic organisms. / May cause long-term adverse effects in the aquatic environment. |
|                         | R65 - Harmful: May cause lung damage if swallowed. |
|                         | R66 - Repeated exposure may cause skin dryness or cracking. |
|                         | R67 - Vapours may cause drowsiness and dizziness. |
| Safety Phrases          | S2 - Keep out of reach of children.       |
|                         | S9 - Keep container in a well-ventilated place. |
|                         | S16 - Keep away from sources of ignition - No smoking. |
|                         | S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |
|                         | S29 - Do not empty into drains.           |
|                         | S33 - Take precautionary measures against static discharges. |
|                         | S46 - If swallowed, seek medical advice immediately and show this container or label. |
|                         | S61 - Avoid release to the environment. Refer to special instructions/Material Safety Data Sheets. |
|                         | S62 - If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. |

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient (common name)</th>
<th>CAS Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>10-30%</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>10-30%</td>
</tr>
<tr>
<td>Isobutane</td>
<td>75-28-5</td>
<td>10-30%</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

Inhalation
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek immediate medical attention.

Ingestion
If accidentally swallowed, dilute by drinking large quantities of water. Seek immediate medical attention. Never give anything by mouth to an unconscious person.

Skin
If skin or hair contact occurs, immediately remove contaminated clothing and wash skin and hair thoroughly with soap and plenty of water. Seek medical attention if symptoms persist. Wash contaminated clothing and other protective equipment before storage or re-use.

Eyes
If in eyes, hold eyelids apart and flush the eye continuously with large amounts of water for at least 15 minutes. Seek immediate medical attention.

5. FIRE FIGHTING MEASURES

For major fires call the Fire Brigade. Ensure that an escape path is available from any fire.

Suitable Extinguishing Media
Carbon dioxide, foam and dry chemical.

Hazardous Combustion Products
Oxides of carbon, oxides of sulfur and hydrocarbons.

Firefighting Equipment
Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.

Unusual Fire or Explosion Hazards
Severe fire hazard. Containers may explode if exposed to heat. The vapour is heavier than air. It may ignite at distant ignition sources and flash back. Move containers from fire area if it can be done without risk. Cool exposed containers with water. Avoid inhalation. Stay upwind and avoid low areas.

Hazchem Code
Not allocated.

6. ACCIDENTAL RELEASE MEASURES

Spills
In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective equipment including self-contained breathing apparatus, eye/face protection and impervious elbow-length gloves. Evacuate general area and deny access to unnecessary and unprotected personnel. Remove all sources of ignition. Use non sparking tools. Take precautionary measures against static discharges. Stay upwind. Stop leak if safe to do so and contain spill. Do not touch spilled
7. HANDLING AND STORAGE

Handling
Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Do not breathe mist or vapours. Observe good personal hygiene, including washing hands before eating. Provide adequate ventilation. Take precautionary measures against static discharges. Empty container may contain explosive vapours. Do not cut, puncture or weld on or nearby. Incineration will cause container to burst violently.

Storage
Store in the closed, original container in a dry, well ventilated area. Keep container tightly closed when not in use. Store below 50°C. Avoid direct sunlight. Protect from heat, sparks, flames or other sources of ignition. Keep from acids, amines, bases, oxidizing and reducing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards
( Safe Work Australia)

2-Methylpentane:
TWA: 500 ppm / 750 mg/m³
STEL: 1000 ppm / 3500 mg/m³
Pentane:
TWA: 600 ppm / 1770 mg/m³
STEL: 750 ppm / 2210 mg/m³
Acetone:
TWA: 500 ppm / 1185 mg/m³
STEL: 1000 ppm / 2375 mg/m³
Dimethyl ether:
TWA: 400 ppm / 760 mg/m³
STEL: 500 ppm / 950 mg/m³
Isobutane:
TWA: 800 ppm / 1900 mg/m³
STEL: - ppm / - mg/m³

Engineering Controls
Local exhaust ventilation is recommended when vapours can be released in excess of established airborne exposure limits.

Respiratory Protection
Respiratory protection is needed under conditions of frequent use or heavy exposure. See Australian Standards AS/NZS 1715 and 1716 for more information. For unknown concentrations or immediate danger to life use any supplied air respirator with full facepiece and operated in a pressure demand or other positive pressure mode or any self-contained breathing apparatus.

Eye Protection
Chemical splash goggles. See Australian Standards AS 1336 and AS/NZS 1337 for more information.

Skin Protection
Chemical resistant gloves and protective clothing. See Australian
Hygienic Practices

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White to off-white liquid (aerosol)</td>
</tr>
<tr>
<td>Odour</td>
<td>Minty odour</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Negligible</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>-42°C - 66°C</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapour Density (Air = 1)</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Specific Gravity (H₂O=1)</td>
<td>0.69</td>
</tr>
<tr>
<td>Volatility</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Faster than butyl acetate</td>
</tr>
<tr>
<td>Percent Volatiles</td>
<td>90%</td>
</tr>
<tr>
<td>Flash Point (PMCC)</td>
<td>-104°C</td>
</tr>
<tr>
<td>Flammable Limit – Lower</td>
<td>1%</td>
</tr>
<tr>
<td>Flammable Limit – Upper</td>
<td>18%</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

| Stability                                    | Stable when stored under proper conditions. |
| Incompatible Materials                       | Acids, amines, bases, oxidizing and reducing agents. |
| Hazardous Decomposition Products             | Oxides of carbon, oxides of sulfur and hydrocarbons. |
| Hazardous Polymerization                     | Will not occur. |
| Conditions to Avoid                          | Heat, sparks, flames or other sources of ignition. |

11. TOXICOLOGICAL INFORMATION

Toxicity

2-Methylpentane: May cause long-term adverse effects in the environment.

Pentane:
Inhalation LC₅₀ (rat) = 364 g/m³ / 4 hours
Inhalation LC₅₀ (mouse) = 325 g/m³ / 2 hours
Harmful by inhalation, ingestion or skin absorption. Irritant. Narcotic in high concentration.

Dimethyl ether:
Inhalation LC₅₀ (rat) = 300 g/m³
Inhalation LC₅₀ (mouse) = 386 ppm /15 minutes
Narcotic in high concentration. Little toxicological effect in normal
industrial or research use. May cause dermatitis with repeated exposure. Exposure to the low-temperature liquid may cause frostbite.

**Acetone:**

Oral LD$_{50}$ (rat) = 5800 mg/kg  
Oral LD$_{50}$ (mouse) = 3000 mg/kg  
Inhalation LC$_{50}$ (rat) = 50100 g/m$^3$/8 hours  
Irritation – Skin (rabbit) = 395 mg – mild  
Irritation – Eye (rabbit) = 20 mg - severe  
May be harmful by inhalation, ingestion or skin absorption. Irritant. Liquid may cause permanent eye damage (corneal clouding). Contact with skin may cause de-fatting, leading to irritation. Long-term exposure may cause liver damage.

**Isobutane:**

Inhalation LC$_{50}$ (rat) = 57 pph /15 minutes  
Asphyxiant. Respiratory irritant. May be harmful by inhalation.

**Propane:**

May be harmful if inhaled. Asphyxiant at high concentrations.

### Routes of Exposure

**Acute Health Effects**

- Inhalation, ingestion, eye and skin
  - Inhalation: Causes respiratory irritation, changes in body temperature, nausea, vomiting, stomach pain, difficult breathing, irregular heartbeat, headache, drowsiness, dizziness, loss of coordination, blurred vision, kidney and liver damage, convulsions, unconsciousness and coma.
  - Ingestion: Harmful: May cause lung damage if swallowed.
  - Eye: Causes eye irritation (possibly severe, blurred vision and lachrimation).
  - Skin: Causes skin irritation and tingling sensation.

**Chronic Health Effects**

- Repeated exposure may cause skin dryness or cracking.

**Existing Conditions**

No information available.

**Aggravated by Exposure**

No information available.

**Carcinogenicity**

This product does NOT contain any IARC listed chemicals.

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Toxic to aquatic organisms. / May cause long-term adverse effects in the aquatic environment.

**Mobility**

No information available.

### 13. DISPOSAL CONSIDERATIONS

**Disposal methods and containers**

Empty container may contain explosive vapours. Do not cut, puncture or weld on or nearby. Incineration will cause container to burst violently. Dispose according to applicable local and state government regulations.

**Special precautions for**

Please consult your state Land Waste Management Authority for
landfill or incineration more information.

14. TRANSPORT INFORMATION

LAND TRANSPORT - ADG

UN Number 1950
Proper Shipping Name AEROSOLS
Dangerous Goods Class Not applicable
Hazchem Code Not applicable
Packing Group Not applicable
Special Provisions 63, 190, 277, 327

15. REGULATORY INFORMATION

2-Methylpentane, pentane, propane, acetone, dimethyl ether and isobutane are listed in the Australian Inventory of Chemical Substances (AICS).

Poisons Schedule: 5

16. OTHER INFORMATION

Last Revision of MSDS Rev 1.0 (17/11/2011)
Prepared by MSDS.COM.AU Pty Ltd

Abbreviations Used
IARC: International Agency for Research on Cancer
NTP: National Toxicology Program (U.S.)
OSHA: Occupational Safety and Health Administration (U.S.)
STEL: Short term exposure limit
TWA: Time weighted average

Emergency Contacts
Pelikan Artline Pty Ltd 02 9674 0900
Pelikan Artline Pty Ltd - Emergency Number 1300 ARTLINE
Police and Fire Brigade 000
Poisons Information Centre 13 11 26

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Please read instructions / label before using product.
This MSDS is prepared in accord with the Safe Work Australia document “National Code of Practice for the Preparation of Material Safety Data Sheets” 2nd Edition [NOHSC:2011(2003)]