AdvaBond® 7426

Section 1. Product and Company Identification

Product Name: AdvaBond® 7426
Chemical Name/Family: Modified polyolefin with maleic anhydride
CAS No.: Mixture
Product Use: Adhesion Promoter
Restrictions: For Industrial Use Only
Company: Advanced Polymer, Inc.
Address: 400 Paterson Plank Road Carlstadt, NJ 07072 U.S.A.
Telephone: 201-933-0600
Fax: 201-933-8442
24 Hour Emergency Number 800-424-9300
24 Hour Chemtrec Number 800-424-9300

Section 2. Hazards Identification

GHS Classification:
- Acute toxicity, oral Category 5
- Acute toxicity, dermal Category 4
- Acute toxicity, inhalation (vapour) Category 4
- Skin corrosion/irritation Category 3
- Eye damage / eye irritation Category 2A
- Reproductive toxicity Category 2
- Specific target organ toxicity (single exposure); Central Nervous System, Blood, Liver, Kidneys Category 1
- Specific target organ toxicity (repeated exposure); Nervous System, Blood Category 2
- Hazardous to aquatic environment (acute toxicity) Category 3

GHS Label:

Pictogram:

Signal Word: Danger

Hazard Classification:

Hazard Statement:
Precautionary Statements:

Prevention

- Wear protective gloves/protective clothing/eye protection/face protection.
- Wash uncovered body surface and hands thoroughly after handling.
- Wear protective gloves / eye protection / face protection.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Do not eat, drink or smoke when using this product.
- Avoid release to the environment.
- Use only outdoors or in a well-ventilated area.

Response

- IF ON SKIN: Wash with plenty of soap and water.
- Call a POISON CENTER or doctor/physician if you feel unwell.
- Wash contaminated clothing before reuse.
- Specific measures (see Section 4 on this SDS).
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- If skin irritation occurs: Get medical advice/attention.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.
- IF exposed or concerned: Get medical advice/attention.
- Get medical advice/attention if you feel unwell.
- Collect spillage.

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with local / regional / national / international regulations.
Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No.</th>
<th>Percent (wt%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modified polyolefin with maleic anhydride</td>
<td>Proprietary</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>Emulsifier</td>
<td>Proprietary</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>Triethylamine</td>
<td>121-44-8</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>Ethylene glycol monobutyl ether (Butyl cellosolve)</td>
<td>111-76-2</td>
<td>5 - 10</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>58 - 63</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

Skin Contact: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

Ingestion: Rinse mouth with water. Get medical attention if you feel unwell.

Section 5. Firefighting Measures

Specific Hazards in Case of Fire: Avoid inhalation of material or combustion by-products (carbon monoxide, nitrogen oxides).

Fire Extinguishing Media: Water spray, regular dry chemical, carbon dioxide, alcohol-resistant foam

Unsuitable Extinguishing Media: No information available.

Special Protective Equipment and Precaution for Firefighters: Move containers from fire area if it can be done without risk. If you cannot move, cool container and its surroundings with water spray. Prohibited from entering into locations around the fires. Fighters should work from the windward side. Wear protective equipment, air-purifying respirator.

Unusual Fire & Explosion Hazards: No information available.

Section 6. Accidental Release Measures

Personal Precautions: Avoid contact with skin or eyes. Avoid breathing vapours or mist. Ensure adequate ventilation. Evacuate personnel to safe areas.

Protective Equipment: Use personal protective equipment (e.g. protective gloves, gas respirators, safety glasses or goggles).

Environmental Precautions: Discharge into the environment must be avoided. Do not let product enter the drain.

Methods and Materials for Containment and Cleaning up: If there is no danger, stop leak. Collect liquid in an appropriate container or absorb with an inert material (e.g. sand earth vermiculite), and place in a chemical waste container. If product is leaked a lot, enclosed by embankments to prevent runoff, leading to a safe place to recover. Remove all sources of ignition.

Section 7. Handling and Storage

Handling Conditions: Avoid contact with eyes, skin or clothing. Avoid inhalation of vapours or mist. Use personal protective equipment (e.g. safety goggles, gas respirators, safety
glasses). Provide appropriate local exhaust or ventilation at working area. Good ventilation is needed at work area. Avoid contact with strong oxidizing materials and acids. Do not eat, drink or smoke when using this product. Wash uncovered body surface and hands thoroughly after handling. **Agitate thoroughly before use.**

**Storage Conditions:**
Store at room temperature in a well-ventilated place. Store dark place. Store in a tightly closed container. Store at >32°F (>0°C). Preferably 41 – 104°F (5 – 40°C). Protect from sunlight. Protect from contamination and incompatible materials. **Protect from freezing.**

**Packaging Materials**
Plastic jerry can, composite drum

---

### Section 8. Exposure Control/Personal Protection

**Exposure Limits:**
- Butyl cellosolve: 25ppm
- Triethylamine: 1ppm TLV-TWA

**Appropriate engineering controls:**
- Provide local exhaust ventilation system.

**Personal protective equipment:**
- **Respiratory Protection:** Chemical cartridge respirators.
- **Hand Protection:** Chemical resistant gloves.
- **Eye Protection:** Wear Safety glasses. Chemical goggles.
- **Skin and Body Protection:** Wear appropriate chemical resistant clothing.
- **Other Safety Equipment:** Provide an emergency eye wash fountain and quick drench shower in the immediate work area.
- **Hygiene Measures:** Wash hands thoroughly after handling.

---

### Section 9. Physical and Chemical Properties

**Physical State:** Liquid

**Color:** Translucent Light Yellow

**Odor:** Slight

**Odor Threshold:** No data available

**pH:** 8.0 – 10.0

**Specific Gravity (77°F):** No data available

**% Volatile by Weight:** No data available

**% VOC:** ~8

**Melting Point:** ~ 32°F (0°C)

**Freezing Point:** No data available

**Boiling point:** No data available

**Flash Point:** ≥176°F (80°C) (Similar product)

**Evaporation Rate (BuAc=1):** No data available

**Flammability:** No data available

**Explosion Limits:** No data available

**Vapor Pressure (mmHg):** No data available

**Vapor Density (Air=1):** No data available

**Solubility:** Dispersible in water

**n-Octanol/Water Partition Coefficient:** Butyl cellosolve: Log Pow = 0.83

Triethylamine : 1.15
Section 10. Stability and Reactivity

Chemical Stability: Stable at normal temperatures and pressure. On contact with hot surfaces or flames this substance decomposes forming carbon monoxide and nitrogen oxides.

Hazardous Polymerization: May not occur

Conditions to Avoid: Avoid heat, sparks, open flames and hot surfaces.

Incompatible Materials: Strong oxidizing materials, strong acids

Hazardous Decomposition Products: Thermal decomposition products: Carbon monoxide, nitrogen oxides (combustion)

Section 11. Toxicological Information

Primary Routes of Entry:

<table>
<thead>
<tr>
<th>Eye:</th>
<th>Yes</th>
<th>Skin:</th>
<th>Yes</th>
<th>Inhalation:</th>
<th>Yes</th>
<th>Ingestion:</th>
<th>Yes</th>
</tr>
</thead>
</table>

Inhalation: Harmful if inhaled.

Ingestion: May be harmful if swallowed.

Skin: Harmful in contact with skin; Causes mild skin irritation.

Eyes: Causes serious eye irritation.

Signs and Symptoms of Exposures: No information available

Acute Toxicity

Butyl cellosolve:
- Inhalation (vapour)-rat LC50 450ppm/4hr (2.2mg/L/4hr)
- Oral-rat LD50 470mg/kg

Triethylamine:
- Inhalation (Rat) LC50 4H – 7.1 mg/l
- Oral (Rat) LD50 730mg/kg (OECD Test Guideline 401)
- Dermal (Rabbit) 580 mg/kg (OECD Test Guideline 402)

Emulsifier:
- Oral-rat LD50 200~2000mg/kg (allied substance)

Skin corrosion/irritation:

Butyl cellosolve: Rabbit; irritation

Triethylmine: Skin Rabbit – Extremely corrosive and destructive to tissue

Emulsifier: Rabbit; no irritation

Eye damage/irritation:

Butyl cellosolve: Draize Test-rabbit; corneal opacity, iritis, conjunctival redness, chemosis

Triethylmine: Eyes Rabbit – Risk of serious damage to eyes (OECD Test Guideline 405)

Emulsifier: Rabbit; Risk on severe disabilities (allied substance)

Skin Sensitization:

Classification not possible (GHS)

Butyl cellosolve: Maximization Test - Guinea pig; Negative

Respiratory Sensitization:

Not available

Mutagenicity:

Classification not possible (GHS)

Butyl cellosolve:
- Somatic mutagenicity test (in vivo); Negative
- Chromosome aberration test; Negative
- Ames test; Negative
### Carcinogenicity:
Classification not possible (GHS)
Butyl cellosolve: 3 (IARC), 3A (ACGIH)

### Reproductive toxicity:
Suspected of damaging fertility or the unborn child
Butyl cellosolve: Since there is description that it is observed of adverse effects in development as decrease implantation count and increase embryo resorptions etc. on maternal animals in pregnant rat and rabbit.

### Specific target to organ toxicity (single exposure)
Causes damage to Central nervous system, Blood, Liver or Kidneys
Butyl cellosolve: In animal, the effect on the erythrocytes is characteristic, but in human, there is the reports not only about the effect to blood such as the decrease of hemoglobin, erythrocytes, and hemoglobinuria, but about the symptoms such as coma, vertigo, dyspnoea, metabolic acidosis, hematuria, unusual liver function.

### Specific target organ toxicity (repeated exposure)
May cause damage to Nervous system and Blood through prolonged or repeated exposure.
Butyl cellosolve: 90-day inhalation exposure test – rat, reduction in erythrocyte count and hemoglobin and hematocrit values at a dose 77ppm, also, hematological conditions such as an increase in mean cell hemoglobin was observed.

### Aspiration hazard
Not available

### Section 12. Ecological Information

#### Ecotoxicity
Harmful to aquatic life
Butyl cellosolve: Fish(Cyprinodon variegates) LC50 = 116mg/L/96hr
Crustacea (Penaeus monodon) LC50 = 130mg/L/96hr
Emulsifier: Crustacea(Daphnia magna) EC50 10-100mg/L/48hr
Algae(green algae) EC50 10-100mg/L/72hr (allied substance)

#### Persistence / Degradability
Not degradable in the environment, remain for a long time. (in the resin composition)
Butyl cellosolve: BOD: 96%
Emulsifier: Biodegradable

#### Bioaccumulation
Not available
Butyl cellosolve Log Pow = 0.83

#### Mobility in Soil:
No data available

#### Other Adverse Effects:
No data available

### Section 13. Disposal Considerations

**Product:** Dispose of contents / container in accordance with local / regional / national /international regulation. Do not dump into sewers, on the ground or into any body of water. Burn in chemical incinerator equipped.

**Disposing of Contaminated Packaging:** Contact a licensed professional waste disposal service to this material.

### Section 14. Transport Information

<table>
<thead>
<tr>
<th>Land Transport (DOT):</th>
<th>Not Regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Number:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>UN Proper Shipping Name:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Transport Hazard Class:</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

AdvaBond® 7426 Page 6
Packing Group: Not Applicable

**Sea Transport (IMDG):**
- UN Number: Not Applicable
- UN Proper Shipping Name: Not Applicable
- Transport Hazard Class: Not Applicable
- Packing Group: Not Applicable

**Air Transport (IATA):**
- UN Number: Not Applicable
- UN Proper Shipping Name: Not Applicable
- Transport Hazard Class: Not Applicable
- Packing Group: Not Applicable

**Environmental Hazards (e.g., Marine pollutant):** None

### Section 15. Regulatory Informational

**International Inventories:**
- TSCA (USA): Yes
- DSL (Canada): Yes
- ENCS (Japan): Yes
- REACH (Europe): No
- IECSC (China): No
- KECL (Korea): No
- PICCS (Philippines): No
- AICS (Australia): No
- ERMA (New Zealand): Unknown

**Federal Regulations:**
- SARA 313: Butyl Cellosolve (CAS # 111-76-2)
- SARA 311/312: No information available
- Clean Water Act: No information available
- Clean Air Act, Section 112 HAPs (See 40CFR61): No information available

**State Regulations:**
- Massachusetts Right to Know Components: Triethylamine (CAS # 121-44-8)
- New Jersey Right to Know Components: Triethylamine CAS # 121-44-8)
- Pennsylvania Right to Know Components: Triethylamine (CAS # 121-44-8)
- California Proposition 65: Butyl Cellosolve (CAS # 111-76-2)

### Section 16. Other Information

**WHMIS Classification:** No information available

**HMIS Rating:**
- Health Hazard: 1
Flammability: 1
Physical Hazard: 0
Personal Protection Equipment: X

NFPA Rating
Health Hazard: 1
Fire Hazard: 1
Reactivity Hazard: 0

Date Prepared .................................. February 5, 2018
Prepared By ................................... Advanced Polymer, Inc.
Date Revised ................................. July 19, 2018
Revised By ................................. Advanced Polymer, Inc.

THE INFORMATION AND RECOMMENDATIONS HEREIN, ARE TO THE BEST OF OUR KNOWLEDGE, TRUE AND ACCURATE. NO WARRANTY, EXPRESS OR IMPLIED, IS MADE OR INTENDED.
TO THE CUSTOMERS OF ADVANCED POLYMER, INC.

All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed, and the following is made in lieu of all warranties, express or implied:

Seller's and manufacturer's only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss of damage, direct, or consequential arising out of the use of or the inability to use the product. Before using, user shall determine the suitability of the product for his intended use. The user assumes all risk and liability whatsoever in connection therewith.

No statement or recommendation contained herein shall have any force or effect unless in an agreement signed by officers of seller and manufacturer. Since the manufacturer of the product described in this technical data sheet has no means of controlling the final use of the product by the consumer for the user, it is the responsibility of the immediate purchaser and any intermediate seller or sellers to inform the user of the purposes for which the product may be fit and suitable and of the properties of the product, including the precautionary measures which must be taken in order to ensure the safety of the user and of other third persons and property.

No statement made herein shall be taken as an authorization or inducement to practice any patented invention without appropriate license.