1 Identification

- **Product identifier**
- **Trade name:** 77723 XXX Plastic Adhesion Promoter
- **Article number:** 77723
- **Application of the substance / the mixture** Coating

- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:** SEM Products Inc. 
  1685 Overview Drive 
  Rock Hill, SC  29730 
  803 207 8225

- **Information department:**
cust_care@semproducts.com  : SEM Products,Inc. 1685 Overview Dr. Rock Hill, SC 29730  : phone 1-800-831-1122, M - TH 7am - 4pm EDT
- **Emergency telephone number:** CHEMTREC 1-800-424-9300

2 Hazard(s) identification

- **Classification of the substance or mixture**
  - GHS02 GHS04 Flame, Gas cylinder
  - Flam. Aerosol 1 H222 Extremely flammable aerosol.
  - GHS04 Gas cylinder
  - Press. Gas H280 Contains gas under pressure; may explode if heated.
  - GHS08 Health hazard
  - Repr. 2 H361 Suspected of damaging fertility or the unborn child.
  - STOT RE 1 H372 Causes damage to the central nervous system through prolonged or repeated exposure.
  - Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

- **GHS07**
  - Skin Irrit. 2 H315 Causes skin irritation.
  - Eye Irrit. 2A H319 Causes serious eye irritation.
  - STOT SE 3 H336 May cause drowsiness or dizziness.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
Trade name: 77723 XXX Plastic Adhesion Promoter

- Hazard pictograms

GHS02  GHS04  GHS07  GHS08

- Signal word Danger

- Hazard-determining components of labeling:
  - toluene
  - Solvent naphtha (petroleum), medium aliph.
  - acetone
  - n-butyl acetate

- Hazard statements
  - H222 Extremely flammable aerosol.
  - H280 Contains gas under pressure; may explode if heated.
  - H315 Causes skin irritation.
  - H319 Causes serious eye irritation.
  - H361 Suspected of damaging fertility or the unborn child.
  - H336 May cause drowsiness or dizziness.
  - H372 Causes damage to the central nervous system through prolonged or repeated exposure.
  - H304 May be fatal if swallowed and enters airways.

- Precautionary statements

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container: Do not pierce or burn, even after use.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 If swallowed: Immediately call a poison center/doctor.
P321 Specific treatment (see on this label).
P331 Do NOT induce vomiting.
P302+P352 If on skin: Wash with plenty of water.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P312 Call a poison center/doctor if you feel unwell.
P314 Get medical advice/attention if you feel unwell.
P362+P364 Take off contaminated clothing and wash it before reuse.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P410+P403 Protect from sunlight. Store in a well-ventilated place.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
Trade name: 77723 XXX Plastic Adhesion Promoter

· Classification system:
  · NFPA ratings (scale 0 - 4)
    Health = 2
    Fire = 4
    Reactivity = 3

· HMIS-ratings (scale 0 - 4)
  Health = 2
  Fire = 4
  Reactivity = 3

· Other hazards
  · Results of PBT and vPvB assessment
    · PBT: Not applicable.
    · vPvB: Not applicable.

3 Composition/Information on ingredients

· Chemical characterization: Mixtures
· Description:
  Mixture: consisting of the following components.
  Weight percentages

· Dangerous components:

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>68476-86-8</td>
<td>Petroleum gases, liquefied, sweetened</td>
<td>13-30%</td>
</tr>
<tr>
<td>64742-88-7</td>
<td>Solvent naphtha (petroleum), medium aliph.</td>
<td>13-30%</td>
</tr>
<tr>
<td>108-88-3</td>
<td>toluene</td>
<td>13-30%</td>
</tr>
<tr>
<td>67-64-1</td>
<td>acetone</td>
<td>13-30%</td>
</tr>
<tr>
<td>123-86-4</td>
<td>n-butyl acetate</td>
<td>27-&lt;10%</td>
</tr>
</tbody>
</table>

4 First-aid measures

· Description of first aid measures
  · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
  · After skin contact: Immediately wash with water and soap and rinse thoroughly.
  · After eye contact:
    Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  · After swallowing:
    If symptoms persist consult doctor.
  · Information for doctor:
    · Most important symptoms and effects, both acute and delayed No further relevant information available.
    · Indication of any immediate medical attention and special treatment needed
      No further relevant information available.

5 Fire-fighting measures

· Extinguishing media
  · Suitable extinguishing agents:
    CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Trade name: 77723 XXX Plastic Adhesion Promoter

- **Special hazards arising from the substance or mixture**: No further relevant information available.
- **Advice for firefighters**: No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions**: Do not allow to enter sewers/surface or ground water.
- **Methods and material for containment and cleaning up**:
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
- **Reference to other sections**
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

#### Protective Action Criteria for Chemicals

**PAC-1:**

- 108-88-3 toluene 67 ppm
- 67-64-1 acetone 200 ppm
- 123-86-4 n-butyl acetate 5 ppm
- 78-93-3 butanone 200 ppm

**PAC-2:**

- 108-88-3 toluene 560 ppm
- 67-64-1 acetone 3200* ppm
- 123-86-4 n-butyl acetate 200 ppm
- 78-93-3 butanone 2700* ppm

**PAC-3:**

- 108-88-3 toluene 3700* ppm
- 67-64-1 acetone 5700* ppm
- 123-86-4 n-butyl acetate 3000* ppm
- 78-93-3 butanone 4000* ppm

### 7 Handling and storage

- **Handling**:
  - **Precautions for safe handling**: No special measures required.
  - **Information about protection against explosions and fires**:
    Do not spray on a naked flame or any incandescent material.
    Keep ignition sources away - Do not smoke.
    Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

- **Conditions for safe storage, including any incompatibilities**

- **Storage**:
  - **Requirements to be met by storerooms and receptacles**:
    Observe official regulations on storing packagings with pressurized containers.

(Contd. on page 5)
Trade name: 77723 XXX Plastic Adhesion Promoter

- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.

- Control parameters

  - Components with limit values that require monitoring at the workplace:
    The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
    At this time, the other constituents have no known exposure limits.

<table>
<thead>
<tr>
<th>Component</th>
<th>PEL Long-term value: 200 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ceiling limit value: 300; 500 ppm</td>
</tr>
<tr>
<td></td>
<td>*10-min peak per 8-hr shift</td>
</tr>
<tr>
<td>Toluene</td>
<td>REL Short-term value: 560 mg/m³, 150 ppm</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 375 mg/m³, 100 ppm</td>
</tr>
<tr>
<td></td>
<td>TLV Long-term value: 75 mg/m³, 20 ppm</td>
</tr>
<tr>
<td></td>
<td>BEI</td>
</tr>
</tbody>
</table>

| Component       | PEL Long-term value: 2400 mg/m³, 1000 ppm |
|-----------------| REL Long-term value: 590 mg/m³, 250 ppm |
| Acetone         | REL Short-term value: 1187 mg/m³, 500 ppm |
|                 | Long-term value: 594 mg/m³, 250 ppm |
|                 | BEI                          |

| Component       | PEL Long-term value: 710 mg/m³, 150 ppm |
|-----------------| REL Long-term value: 950 mg/m³, 200 ppm |
| n-Butyl acetate | REL Short-term value: 712 mg/m³, 150 ppm |
|                 | Long-term value: 238 mg/m³, 50 ppm |
|                 | BEI                          |

- Ingredients with biological limit values:

<table>
<thead>
<tr>
<th>Component</th>
<th>BEI 0.02 mg/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>Medium: blood</td>
</tr>
<tr>
<td></td>
<td>Time: prior to last shift of workweek</td>
</tr>
<tr>
<td></td>
<td>Parameter: Toluene</td>
</tr>
<tr>
<td>Acetone</td>
<td>0.03 mg/L</td>
</tr>
<tr>
<td></td>
<td>Medium: urine</td>
</tr>
<tr>
<td></td>
<td>Time: end of shift</td>
</tr>
<tr>
<td></td>
<td>Parameter: Toluene</td>
</tr>
<tr>
<td>n-Butyl acetate</td>
<td>0.3 mg/g creatinine</td>
</tr>
<tr>
<td></td>
<td>Medium: urine</td>
</tr>
<tr>
<td></td>
<td>Time: end of shift</td>
</tr>
<tr>
<td></td>
<td>Parameter: o-Cresol with hydrolysis (background)</td>
</tr>
</tbody>
</table>
Trade name: 77723 XXX Plastic Adhesion Promoter

· Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls
· Personal protective equipment:
· General protective and hygienic measures:
   Keep away from foodstuffs, beverages and feed.
   Immediately remove all soiled and contaminated clothing.
   Wash hands before breaks and at the end of work.
   Store protective clothing separately.
   Avoid contact with the eyes and skin.
· Breathing equipment:
   In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
· Protection of hands:
   Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
   Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
   Protective gloves
   The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
· Material of gloves
   The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· Penetration time of glove material
   The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· Eye protection:
   Safety glasses
   Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties
· General Information
· Appearance:
  Form: Aerosol
  Color: According to product specification
  Odor: Characteristic
Trade name: 77723 XXX Plastic Adhesion Promoter

10 Stability and reactivity

- Reactivity: No further relevant information available.
- Chemical stability
  - Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions: No dangerous reactions known.
- Conditions to avoid: No further relevant information available.
- Incompatible materials: No further relevant information available.
Trade name: 77723 XXX Plastic Adhesion Promoter

- Hazardous decomposition products: No dangerous decomposition products known.

### 11 Toxicological information

- Information on toxicological effects
- Acute toxicity:

<table>
<thead>
<tr>
<th>LD/LC50 values that are relevant for classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-88-7 Solvent naphtha (petroleum), medium aliph.</td>
</tr>
<tr>
<td>Oral LD50 &gt;6,500 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal LD50 &gt;3,000 mg/kg (rab)</td>
</tr>
<tr>
<td>Inhalative LC50/4 h &gt;14 mg/l (rat)</td>
</tr>
<tr>
<td>108-88-3 toluene</td>
</tr>
<tr>
<td>Oral LD50 5,000 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal LD50 12,124 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Inhalative LC50/4 h 5,320 mg/l (mouse)</td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - on the skin: Irritant to skin and mucous membranes.
  - on the eye: Irritating effect.

- Sensitization: No sensitizing effects known.

- Additional toxicological information:
The product shows the following dangers according to internally approved calculation methods for preparations:

  - Irritant

### Carcinogenic categories

- IARC (International Agency for Research on Cancer)
  - 108-88-3 toluene 3

- NTP (National Toxicology Program)
  - None of the ingredients is listed.

- OSHA-Ca (Occupational Safety & Health Administration)
  - None of the ingredients is listed.

### 12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.

- Behavior in environmental systems:
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.

- Additional ecological information:

- General notes:
  - Water hazard class 2 (Self-assessment): hazardous for water
  - Do not allow product to reach ground water, water course or sewage system.
  - Danger to drinking water if even small quantities leak into the ground.

- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
13 Disposal considerations

- **Other adverse effects** No further relevant information available.

14 Transport information

- **UN-Number**
  - DOT, ADR, IMDG, IATA UN1950

  - **UN proper shipping name**
    - DOT Aerosols, flammable
    - ADR 1950 Aerosols
    - IMDG AEROSOLS
    - IATA AEROSOLS, flammable

- **Transport hazard class(es)**
  - DOT
    - Class 2.1
    - Label 2.1

  - ADR
    - Class 2.1
    - Label 2.1

  - IMDG, IATA
    - Class 2.1
    - Label 2.1

  - **Packing group**
    - DOT, ADR, IMDG, IATA Void
### Environmental hazards:
- Marine pollutant: No

### Special precautions for user
- Warning: Gases
- EMS Number: F-D,S-U
- Stowage Code:
  - SW1 Protected from sources of heat.
  - SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
- Segregation Code:
  - SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Store "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

### Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
- Not applicable.

### Transport/Additional information:
- DOT
  - Quantity limitations:
    - On passenger aircraft/rail: 75 kg
    - On cargo aircraft only: 150 kg
- ADR
  - Excepted quantities (EQ): Code: E0
    - Not permitted as Excepted Quantity
- IMDG
  - Limited quantities (LQ): 1L
  - Excepted quantities (EQ): Code: E0
    - Not permitted as Excepted Quantity
- UN "Model Regulation": UN 1950 AEROSOLS, 2.1

### 15 Regulatory information
- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Sara
  - Section 355 (extremely hazardous substances):
    - None of the ingredient is listed.
  - Section 313 (Specific toxic chemical listings):
    - 108-88-3 toluene
    - 78-93-3 butanone
  - TSCA (Toxic Substances Control Act):
    - 64742-88-7 Solvent naphtha (petroleum), medium aliph.
    - 108-88-3 toluene
    - 67-64-1 acetone
    - 123-86-4 n-butyl acetate
### Trade name: 77723 XXX Plastic Adhesion Promoter

- **Chemicals known to cause cancer:**
  None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**
  None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**
  None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**
  - 108-88-3 toluene

### Cancerogenity categories

- **EPA (Environmental Protection Agency)**
  - 108-88-3 toluene II
  - 67-64-1 acetone I
  - 78-93-3 butanone I

- **TLV (Threshold Limit Value established by ACGIH)**
  - 108-88-3 toluene A4
  - 67-64-1 acetone A4

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  None of the ingredients is listed.

### GHS label elements
The product is classified and labeled according to the Globally Harmonized System (GHS).

#### Hazard pictograms

- GHS02
- GHS04
- GHS07
- GHS08

#### Signal word
Danger

#### Hazard-determining components of labeling:
- toluene
- Solvent naphtha (petroleum), medium aliph.
- acetone
- n-butyl acetate

#### Hazard statements
- H222 Extremely flammable aerosol.
- H280 Contains gas under pressure; may explode if heated.
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- H319 Causes serious eye irritation.
- H361 Suspected of damaging fertility or the unborn child.
- H336 May cause drowsiness or dizziness.
- H361 Causes damage to the central nervous system through prolonged or repeated exposure.
- H304 May be fatal if swallowed and enters airways.
Trade name: 77723 XXX Plastic Adhesion Promoter

Precautionary statements

P201 Obtain special instructions before use.
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P251 Pressurized container: Do not pierce or burn, even after use.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 If swallowed: Immediately call a poison center/doctor.
P321 Specific treatment (see on this label).
P331 Do NOT induce vomiting.
P302+P352 If on skin: Wash with plenty of water.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P312 Call a poison center/doctor if you feel unwell.
P314 Get medical advice/attention if you feel unwell.
P362+P364 Take off contaminated clothing and wash it before reuse.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P410+P403 Protect from sunlight. Store in a well-ventilated place.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS: Environment protection department.

Contact: Rita Joiner (rjoiner@semproducts.com)

Date of preparation / last revision 03/14/2018 / 6

Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
**Trade name:** 77723 XXX Plastic Adhesion Promoter

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50</td>
<td>Lethal concentration, 50 percent</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal dose, 50 percent</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>vPvB</td>
<td>very Persistent and very Bioaccumulative</td>
</tr>
<tr>
<td>NIOSH</td>
<td>National Institute for Occupational Safety</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety &amp; Health</td>
</tr>
<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
</tr>
<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
</tr>
<tr>
<td>REL</td>
<td>Recommended Exposure Limit</td>
</tr>
<tr>
<td>BEI</td>
<td>Biological Exposure Limit</td>
</tr>
<tr>
<td>Flam. Aerosol</td>
<td>Aerosols – Category 1</td>
</tr>
<tr>
<td>Press. Gas</td>
<td>Gases under pressure – Compressed gas</td>
</tr>
<tr>
<td>Skin Irrit.</td>
<td>Skin corrosion/irritation – Category 2</td>
</tr>
<tr>
<td>Eye Irrit.</td>
<td>Serious eye damage/eye irritation – Category 2A</td>
</tr>
<tr>
<td>Repr.</td>
<td>Reproductive toxicity – Category 2</td>
</tr>
<tr>
<td>STOT SE</td>
<td>Specific target organ toxicity (single exposure) – Category 3</td>
</tr>
<tr>
<td>STOT RE</td>
<td>Specific target organ toxicity (repeated exposure) – Category 1</td>
</tr>
<tr>
<td>Asp. Tox.</td>
<td>Aspiration hazard – Category 1</td>
</tr>
</tbody>
</table>

* Data compared to the previous version altered.

USA