

Material Safety Data Sheet
acc. to ISO/DIS 11014



Printing date 01/31/2008

Reviewed on 01/31/2008

1 Identification of substance

· **Product details**

· **Trade name:** Adhesion Promoter Aerosol

· **Article number:** 39863

· **Manufacturer/Supplier:**

SEM Products Inc.
651 Michael Wylie Dr.
Charlotte, NC 28217
(704)522-1006

· **Information department:**

labsupport@sem.ws : SEM Products 651 Michael Wylie Dr. Charlotte, NC 28217 : phone 1-704-522-1006, M - TH 7am - 4pm EDT

· **Emergency information:** 24 HR EMERGENCY CHEMTREC 1-800-424-9300

2 Composition/Data on components

· **Chemical characterization**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

68476-86-8	Petroleum gases, liquefied, sweetened Danger: 2.2/1 Warning: 2.5/C	10-25%
64742-89-8	Solvent naphtha (petroleum), light aliph. Danger: 2.6/1; 3.10/1	10-25%
108-88-3	toluene Danger: 2.6/2; 3.10/1, 3.7/2 Warning: 3.2/2, 3.3/2A, 3.8/3	10-25%
67-64-1	acetone Danger: 2.6/2 Warning: 3.3/2A, 3.8/3	10-25%
123-86-4	n-butyl acetate Warning: 2.6/3; 3.8/3	2.5-10%

3 Hazards identification

· **Hazard description:**



Harmful
Extremely flammable

· **Information pertaining to particular dangers for man and environment:**

The product has to be labelled due to the calculation procedure of international guidelines.

Warning! Pressurized container.

Extremely flammable.

Harmful by inhalation.

Irritating to eyes, respiratory system and skin.

Danger of serious damage to health by prolonged exposure.

Possible risk of harm to the unborn child.

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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.

96.5 % by mass of the contents are flammable

Keep out of the reach of children.

· **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



· **GHS label elements**



2.2/1 - Extremely flammable gas.

2.3/1 - Extremely flammable aerosol.



3.7/2 - Suspected of damaging fertility or the unborn child.



3.1/4 - Harmful if inhaled.

3.2/2 - Causes skin irritation.

3.3/2A - Causes serious eye irritation.

3.8/3 - May cause respiratory irritation.

· **Prevention:**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Use personal protective equipment as required.

· **Response:**

IF ON SKIN: Wash with plenty of soap and water.

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

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*IF exposed or concerned: Get medical advice/attention.
Call a POISON CENTER or doctor/physician if you feel unwell.
Specific treatment (see label).
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.
Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
Eliminate all ignition sources if safe to do so.*

· **Storage:**

*Store in a well-ventilated place.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.*

· **Disposal:**

Dispose of contents/container in accordance with local/regional/national/international regulations.

4 First aid measures

· **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

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.*

5 Fire fighting measures

· **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **For safety reasons unsuitable extinguishing agents:** *Water with full jet*

· **Protective equipment:** *Mouth respiratory protective device.*

6 Accidental release measures

· **Person-related safety precautions:** *Wear protective equipment. Keep unprotected persons away.*

· **Measures for environmental protection:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· **Measures for cleaning/collecting:**

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.



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7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **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.
Protect against electrostatic charges.
Keep respiratory protective device available.
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.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Do not gas tight seal receptacle.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.

8 Exposure controls and personal protection

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

- **Components with limit values that require monitoring at the workplace:**

108-88-3 toluene

PEL	Short-term value: C 300; 500* ppm Long-term value: 200 ppm *10-min peak per 8-hr shift
REL	Short-term value: 560 mg/m ³ , 150 ppm Long-term value: 375 mg/m ³ , 100 ppm
TLV	75 mg/m ³ , 20 ppm

67-64-1 acetone

PEL	2400 mg/m ³ , 1000 ppm
REL	590 mg/m ³ , 250 ppm
TLV	Short-term value: 1782 mg/m ³ , 750 ppm Long-term value: 1188 mg/m ³ , 500 ppm BEI

123-86-4 n-butyl acetate

PEL	710 mg/m ³ , 150 ppm
REL	Short-term value: 950 mg/m ³ , 200 ppm Long-term value: 710 mg/m ³ , 150 ppm
TLV	Short-term value: 950 mg/m ³ , 200 ppm Long-term value: 713 mg/m ³ , 150 ppm

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

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- **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:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
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

- **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:**



Tightly sealed goggles

9 Physical and chemical properties

· General Information	
Form:	Aerosol
Color:	According to product specification
Odor:	Characteristic
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	< -17°C (< 1°F)
Flash point:	< -17°C (< 1°F)
Ignition temperature:	370°C (698°F)
Auto igniting:	Product is not selfigniting.
Danger of explosion:	In use, may form flammable/explosive vapour-air mixture.

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- **Explosion limits:**
 - Lower: 1.2 Vol %
 - Upper: 13.0 Vol %
- **Vapor pressure at 20°C (68°F):** 233 hPa (175 mm Hg)
- **Density at 20°C (68°F):** 0.71 g/cm³
- **Solubility in / Miscibility with Water:** Not miscible or difficult to mix.
- **Solvent content:**
 - Organic solvents: 96.5 %
 - VOC content: 82.3 %
 - 591.4 g/l / 4.94 lb/gl
- **Solids content:** 3.5 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

108-88-3 toluene

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12124 mg/kg (rabbit)
Inhalative	LC50/4 h	5320 mg/l (mouse)

- **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:

Harmful
Irritant

12 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.

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13 Disposal considerations

- **Product:**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **DOT regulations:**



- **Hazard class:** 2.1
- **Identification number:** UN1950
- **Packing group:** -
- **Proper shipping name (technical name):** AEROSOLS, flammable
- **Label:** 2.1

· **Land transport TDG (Canada) and ADR/RID (Europe):**



- **Hazard class:** 2 5F Gases
- **UN-Number:** 1950
- **Packaging group:** -
- **Label:** 2.1
- **Description of goods:** 1950 AEROSOLS

· **Maritime transport IMDG:**



- **IMDG Class:** 2.1
- **UN Number:** 1950
- **Label:** 2.1
- **Packaging group:** -
- **EMS Number:** F-D,S-U
- **Marine pollutant:** No
- **Propper shipping name:** AEROSOLS

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USA



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· Air transport ICAO-TI and IATA-DGR:



· ICAO/IATA Class: 2.1
 · UN/ID Number: 1950
 · Label: 2.1
 · Packaging group: -
 · Proper shipping name: AEROSOLS, flammable

· UN "Model Regulation": UN1950; AEROSOLS; 2.1; -

15 Regulations

· 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):

68476-86-8 Petroleum gases, liquefied, sweetened

64742-89-8 Solvent naphtha (petroleum), light aliph.

108-88-3 toluene

67-64-1 acetone

123-86-4 n-butyl acetate

78-93-3 butanone

· Proposition 65

· 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

D

67-64-1 acetone

D

78-93-3 butanone

D

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· IARC (International Agency for Research on Cancer)	
108-88-3 toluene	3
· NTP (National Toxicology Program)	
None of the ingredients is listed.	
· 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.	
· OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**

Harmful
Extremely flammable

· **Hazard-determining components of labelling:**

toluene
Solvent naphtha (petroleum), light aliph.

· **Risk phrases:**

Extremely flammable.
Harmful by inhalation.
Irritating to eyes, respiratory system and skin.
Danger of serious damage to health by prolonged exposure.
Possible risk of harm to the unborn child.

· **Safety phrases:**

Avoid exposure - obtain special instructions before use.
Keep locked up and out of the reach of children.
Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
Wear suitable protective clothing, gloves and eye/face protection.
In case of insufficient ventilation, wear suitable respiratory equipment.

· **Special labeling of certain preparations:**

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.
96.5 % by mass of the contents are flammable
Keep out of the reach of children.

16 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 MSDS:** Environment protection department.
- **Contact:** Steve Gaver

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Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement internationale concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

USA