



Printing date 06/01/2005

Reviewed on 09/08/2004

1 Identification of substance

- **Product details**
- **Trade name:** 38371;38374 SEM Solve
- **Article number:** 38371;38374
- **Manufacturer/Supplier:**
SEM Products, Inc.
651 Michael Wylie Dr.
Charlotte, NC 28217
USA
(704)522-1006
- **Information department:** 24HR EMERGENCY CHEMTREC 800-424-9300

2 Composition/Data on components

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

64742-89-8	Solvent naphtha (petroleum), light aliph.	50-100%
1330-20-7	xylene	10-25%
108-88-3	toluene	≤ 2.5%

3 Hazards identification

- **Hazard description:**



Harmful
Highly flammable

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

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

Highly flammable.

Harmful by inhalation and in contact with skin.

Irritating to eyes, respiratory system and skin.

Harmful: may cause lung damage if swallowed.

- **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)**



Health = 2

Fire = 3

Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = *2

Fire = 3

Reactivity = 0

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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, sand, extinguishing powder. Do not use water.

· **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:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

7 Handling and storage

· **Handling:**

· **Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

· **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** Store in a cool location.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:**

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.



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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:**

1330-20-7 xylene

PEL	435 mg/m ³ , 100 ppm
REL	Short-term value: 655 mg/m ³ , 150 ppm Long-term value: 435 mg/m ³ , 100 ppm (o-, m-, & p-isomers)
TLV	Short-term value: 651 mg/m ³ , 150 ppm Long-term value: 434 mg/m ³ , 100 ppm BEI

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	188 mg/m ³ , 50 ppm Skin; BEI

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

· **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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **Eye protection:**

Tightly sealed goggles

9 Physical and chemical properties

· **General Information**

Form:	Fluid
Color:	According to product specification
Odor:	Characteristic

· **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	137°C (279°F)

· **Flash point:** 7°C (45°F)· **Ignition temperature:** 500.0°C (932°F)· **Auto igniting:** Product is not selfigniting.· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.· **Explosion limits:**

Lower:	1.1 Vol %
Upper:	7.0 Vol %

· **Vapor pressure at 20°C (68°F):** 14.0 hPa (11 mm Hg)· **Density at 20°C (68°F):** 0.77 g/cm³· **Solubility in / Miscibility with****Water:** Not miscible or difficult to mix.· **Solvent content:**

Organic solvents:	100.0 %
VOC content:	100.0 %
	772.0 g/l / 6.44 lb/gal

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:**

1330-20-7 xylene

Oral	LD50	4300 mg/kg (rat)
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Dermal LD50 2000 mg/kg (rabbit)

- **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.

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:** 3
- **Identification number:** UN1263
- **Packing group:** III
- **Proper shipping name (technical name):** PAINT RELATED MATERIAL
- **Label:** 3

- **Land transport ADR/RID (cross-border):**



- **ADR/RID class:** 3 Flammable liquids
- **Danger code (Kemler):** 30
- **UN-Number:** 1263
- **Packaging group:** III
- **Label:** 3

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· **Description of goods:** 1263 PAINT RELATED MATERIAL, special provision 640E

· **Maritime transport IMDG:**



· **IMDG Class:** 3
 · **UN Number:** 1263
 · **Label:** 3
 · **Packaging group:** III
 · **EMS Number:** F-E,S-E
 · **Marine pollutant:** No
 · **Propper shipping name:** PAINT RELATED MATERIAL

· **Air transport ICAO-TI and IATA-DGR:**



· **ICAO/IATA Class:** 3
 · **UN/ID Number:** 1263
 · **Label:** 3
 · **Packaging group:** III
 · **Propper shipping name:** PAINT RELATED MATERIAL

15 Regulations

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

1330-20-7 xylene

108-88-3 toluene

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

1330-20-7 xylene

· **Chemicals known to cause reproductive toxicity:**

108-88-3 toluene

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**

1330-20-7 xylene

D

108-88-3 toluene

D

· **IARC (International Agency for Research on Cancer)**

1330-20-7 xylene

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108-88-3	toluene	3
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· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

1330-20-7	xylene	A4
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108-88-3	toluene	A4
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· **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

Highly flammable

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

Solvent naphtha (petroleum), light aliph.

xylene

· **Risk phrases:**

Highly flammable.

Harmful by inhalation and in contact with skin.

Irritating to eyes, respiratory system and skin.

Harmful: may cause lung damage if swallowed.

· **Safety phrases:**

Keep locked up and out of the reach of children.

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 accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Avoid exposure - obtain special instructions before use.

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:** Mr. George Wallace