



1 Identification of the substance/mixture and of the company/undertaking

· **Product details**

· **Trade name:** 38371;38374 SEM Solve

· **Article number:** 38371, 38374

· **Application of the substance / the preparation** surface preparation

· **Manufacturer/Supplier:**

SEM Products Inc.
1685 Overview Drive
Rock Hill, SC 29730
803 207 8225

· **Further information obtainable from:**

cust_care@semproducts.com : SEM Products, Inc. 1685 Overview Dr. Rock Hill, SC 29730 : phone 1-800-831-1122, M - TH 7am - 4pm EDT

· **Information in case of emergency:** 24 HR EMERGENCY CHEMTREC 1-800-424-9300

2 Hazards identification

· **Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS08 health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xn; Harmful

R20/21-65: Harmful by inhalation and in contact with skin. Harmful: may cause lung damage if swallowed.



Xi; Irritant

R38: Irritating to skin.



F; Highly flammable

R11: Highly flammable.

· **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
- **Hazard pictograms**



GHS02 GHS07 GHS08

- **Signal word** *Danger*
- **Hazard-determining components of labelling:**
xylene
Solvent naphtha (petroleum), medium aliph.
toluene
- **Hazard statements**
H225 Highly flammable liquid and vapour.
H332 Harmful if inhaled.
H315 Causes skin irritation.
H304 May be fatal if swallowed and enters airways.

- **Precautionary statements**

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **Code letter and hazard designation of product:**



Xn Harmful
F Highly flammable

- **Hazard-determining components of labelling:**
Solvent naphtha (petroleum), medium aliph.
xylene
- **Risk phrases:**
11 Highly flammable.
20/21 Harmful by inhalation and in contact with skin.
38 Irritating to skin.
65 Harmful: may cause lung damage if swallowed.
- **Safety phrases:**
9 Keep container in a well-ventilated place.
16 Keep away from sources of ignition - No smoking.
36/37 Wear suitable protective clothing and gloves.

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60 This material and its container must be disposed of as hazardous waste.

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3 Composition/information on ingredients

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

- **Dangerous components:**

CAS: 64742-88-7 EINECS: 265-191-7	Solvent naphtha (petroleum), medium aliph. Xn R65 R10 ----- Asp. Tox. 1, H304	70 - 100%
CAS: 1330-20-7 EINECS: 215-535-7	xylene Xn R20/21; Xi R38 R10 ----- Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	13 - 30%
CAS: 108-88-3 EINECS: 203-625-9	toluene Xn R48/20-63-65; Xi R38; F R11 R67 ----- Flam. Liq. 2, H225; Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336	1.5 - 5%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

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.
- **After swallowing:** If symptoms persist consult doctor.

5 Firefighting 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 to enter sewers/ surface or ground water.

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· **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.
- Prevent formation of aerosols.

· **Information about fire - and explosion protection:**

- Keep ignition sources away - Do not smoke.
- Protect against electrostatic charges.

· **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 container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.

8 Exposure controls/personal protection

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

· **Ingredients with limit values that require monitoring at the workplace:**

1330-20-7 xylene

WEL ()	Short-term value: 441 mg/m ³ , 100 ppm Long-term value: 220 mg/m ³ , 50 ppm Sk; BMGV
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108-88-3 toluene

WEL ()	Short-term value: 384 mg/m ³ , 100 ppm Long-term value: 191 mg/m ³ , 50 ppm Sk
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- **Additional information:** The lists valid during the making 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.
- Avoid contact with the skin.
- Avoid contact with the eyes and skin.

· **Respiratory protection:**

- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

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· **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.

· **Eye protection:**

Tightly sealed goggles

9 Physical and chemical properties

· **General Information**· **Appearance:**

Form: Liquid
Colour: According to product specification
Odour: Characteristic

· **Change in condition**

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 137°C

· **Flash point:** 7°C

· **Ignition temperature:** 265°C

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** In use, may form flammable/explosive vapour-air mixture.

· **Explosion limits:**

Lower: 0.6 Vol %
Upper: 7.0 Vol %

· **Vapour pressure at 20°C:** 6.7 hPa

· **Density at 20°C:** 0.77 g/cm³

· **Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

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· **Solvent content:**

Organic solvents:	100.0 %
VOC (EC)	772 g/l
	772.0 g/l

10 Stability and reactivity

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

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

64742-88-7 Solvent naphtha (petroleum), medium aliph.

Oral	LD50	>6500 mg/kg (rat)
Dermal	LD50	>3000 mg/kg (rab)
Inhalative	LC50/4 h	>14 mg/l (rat)

1330-20-7 xylene

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

· **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful
Irritant

12 Ecological information

· **Additional ecological information:**

· **General notes:**

Water hazard class 2 (German Regulation) (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 together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

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



- **ADR/RID class:** 3 Flammable liquids.
- **Danger code (Kemler):** 33
- **UN-Number:** 1263
- **Packaging group:** II
- **Hazard label:** 3
- **Description of goods:** 1263 PAINT, special provision 640D
- **Tunnel restriction code D/E**

- **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1263
- **Label** 3
- **Packaging group:** II
- **EMS Number:** F-E,S-E
- **Marine pollutant:** No
- **Proper shipping name:** PAINT

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



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1263
- **Label** 3
- **Packaging group:** II
- **Proper shipping name:** PAINT

- **UN "Model Regulation":** UN1263, PAINT, 3, II

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15 Regulatory information

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

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.

- **Relevant phrases**

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

R10 Flammable.

R11 Highly flammable.

R20/21 Harmful by inhalation and in contact with skin.

R38 Irritating to skin.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R63 Possible risk of harm to the unborn child.

R65 Harmful: may cause lung damage if swallowed.

R67 Vapours may cause drowsiness and dizziness.

- **Department issuing MSDS:** Environment protection department.

- **Contact:** Steve Gaver

- **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 international 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

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

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent