



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

- **Product identifier**
- **Trade name:** *TPO-Direct Bumper Coaters*
- **Article number:**
39153N, 39253N, 39263N, 39273N, 39163N, 39173N, 39183N, 39193N, 39283N, 39293N, 39413N, 39423N, 39443N, 39583N, 39023N, 39033N, 39073N, 39083N, 39103N
- **Application of the substance / the preparation** *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:** 24 HR EMERGENCY CHEMTREC 1-800-424-9300

2 Composition/information on ingredients

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

· **Dangerous components:**

115-10-6	dimethyl ether ⚠ H220; ⚠ H280	40 - 60%
108-88-3	toluene ⚠ H225; ⚠ H361; H373; H304; ⚠ H315; H336	13 - 30%
110-19-0	isobutyl acetate ⚠ H225	13 - 30%
110-82-7	cyclohexane ⚠ H225; ⚠ H304; ⚠ H400; H410; ⚠ H315; H336	1.5 - 5%
108-83-8	2,6-dimethylheptan-4-one ⚠ H226; ⚠ H335	1-1.5%
	Polyester Plasticizer ⚠ H315; H319	1-1.5%

3 Hazards identification

- **Classification of the substance or mixture**



GHS02 Flame

H222 Extremely flammable aerosol.



GHS08 Health hazard

H361 Suspected of damaging fertility or the unborn child.

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

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- H315 Causes skin irritation.
- H336 May cause drowsiness or dizziness.
- H333 May be harmful if inhaled.
- H412 Harmful to aquatic life with long lasting effects.

· **Label elements**

- **GHS label elements** The product is classified and labelled according to the Globally Harmonized System (GHS).
- **Hazard pictograms** GHS02, GHS07, GHS08
- **Signal word** Danger

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

toluene

· **Hazard statements**

- Extremely flammable aerosol.
- May be harmful if inhaled.
- Causes skin irritation.
- Suspected of damaging fertility or the unborn child.
- May cause drowsiness or dizziness.
- May cause damage to organs through prolonged or repeated exposure.
- Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

- If medical advice is needed, have product container or label at hand.
- Keep out of reach of children.
- Read label before use.
- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Pressurized container: Do not pierce or burn, even after use.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Store locked up.
- Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
- Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



4 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.

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5 Firefighting measures

- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Protective equipment:** 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 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.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
No special measures required.
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.
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.

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· **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.

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

115-10-6 dimethyl ether

WEEL 1000 ppm

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/m³, 150 ppm

Long-term value: 375 mg/m³, 100 ppm

TLV 75 mg/m³, 20 ppm

BEI

110-19-0 isobutyl acetate

PEL 700 mg/m³, 150 ppm

REL 700 mg/m³, 150 ppm

TLV 713 mg/m³, 150 ppm

110-82-7 cyclohexane

PEL 1050 mg/m³, 300 ppm

REL 1050 mg/m³, 300 ppm

TLV 344 mg/m³, 100 ppm

108-83-8 2,6-dimethylheptan-4-one

PEL 290 mg/m³, 50 ppm

REL 150 mg/m³, 25 ppm

TLV 145 mg/m³, 25 ppm

· **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.

Avoid contact with the skin.

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

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- **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: Aerosol
Color: According to product specification

- **Odor:** Characteristic

- **Odour threshold:** Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: < -17°C (< 1 °F)

- **Flash point:** -42°C (-44 °F)

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 235°C (455 °F)

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not selfigniting.

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

- **Explosion limits:**

Lower: 1.2 Vol %

Upper: 18.6 Vol %

- **Vapor pressure at 20°C (68 °F):** 5200 hPa (3900 mm Hg)

- **Density at 20°C (68 °F):** 0.79 g/cm³ (6.593 lbs/gal)

- **Relative density** Not determined.

- **Vapour density** Not determined.

- **Evaporation rate** Not applicable.

- **Solubility in / Miscibility with**

Water: Not miscible or difficult to mix.

- **Segregation coefficient (n-octanol/water):** Not determined.

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- **Viscosity:**
 - Dynamic:** Not determined.
 - Kinematic:** Not determined.
- **Solvent content:**
 - Organic solvents:** 89.8 %
 - VOC content:** 89.8 %
 - 507.0 g/l / 4.23 lb/gl
- **Solids content:** 5.2 %
- **Other information** No further relevant information available.

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** 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)

110-82-7 cyclohexane

Oral	LD50	12705 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information

- **Acquatic 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.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
 - Water hazard class 3 (Self-assessment): extremely hazardous for water
 - Do not allow product to reach ground water, water course or sewage system, even in small quantities.
 - Danger to drinking water if even extremely small quantities leak into the ground.

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Harmful to aquatic organisms

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13 Disposal considerations

- **Waste treatment methods**
- **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

· **UN-Number**
· **DOT** UN1950 ORM-D 49CFR-173.150,156,306
· **ADR, IMDG, IATA** UN1950

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

· **Transport hazard class(es)**
· **DOT, IMDG, IATA**



· **Class** 2.1
· **Label** 2.1

· **ADR**



· **Class** 2 5F Gases
· **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

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

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· **Transport/Additional information:**

· **DOT**

· **Remarks**

· **UN "Model Regulation":**

UN1950, AEROSOLS, 2.1

15 Regulatory information

· **Sara**

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

None of the ingredient is listed.

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

108-88-3	toluene
110-82-7	cyclohexane
7429-90-5	aluminium
	ACRYLIC RESIN
1330-20-7	xylene
78-93-3	butanone
67-63-0	propan-2-ol
100-41-4	ethylbenzene
67-56-1	methanol
14807-96-6	Talc (Mg ₃ H ₂ (SiO ₃) ₄)

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

115-10-6	dimethyl ether
108-88-3	toluene
110-19-0	isobutyl acetate
110-82-7	cyclohexane
108-83-8	2,6-dimethylheptan-4-one
1333-86-4	Carbon black
7429-90-5	aluminium
19549-80-5	4,6-dimethylheptan-2-one
64742-88-7	Solvent naphtha (petroleum), medium aliph.
13463-67-7	titanium dioxide
51274-00-1	YELLOW IRON OXIDE
1330-20-7	xylene
78-93-3	butanone
67-63-0	propan-2-ol
1332-37-2	Iron oxide

· **Proposition 65**

· **Chemicals known to cause cancer:**

1333-86-4	Carbon black
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1330-20-7	xylene
100-41-4	ethylbenzene
25068-38-6	bisphenolA(chloro)oxirane polymer
68911-87-5	ALKYL QUATERNARY AMMONIUM MONTMORILLONITE

· Chemicals known to cause reproductive toxicity for females:

108-88-3	toluene
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· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

108-88-3	toluene
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· Cancerogenity categories

· EPA (Environmental Protection Agency)

108-88-3	toluene	II
110-82-7	cyclohexane	I
1330-20-7	xylene	I
78-93-3	butanone	I
100-41-4	ethylbenzene	D

· IARC (International Agency for Research on Cancer)

108-88-3	toluene	3
1333-86-4	Carbon black	2B
13463-67-7	titanium dioxide	2B
1330-20-7	xylene	3
67-63-0	propan-2-ol	3
100-41-4	ethylbenzene	2B
7631-86-9	silicon dioxide, chemically prepared	3
14807-96-6	Talc (Mg3H2(SiO3)4)	3

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

108-88-3	toluene	A4
1333-86-4	Carbon black	A4
7429-90-5	aluminium	A4
13463-67-7	titanium dioxide	A4
1330-20-7	xylene	A4
67-63-0	propan-2-ol	A4
100-41-4	ethylbenzene	A3
14807-96-6	Talc (Mg3H2(SiO3)4)	A4

· NIOSH-Ca (National Institute for Occupational Safety and Health)

1333-86-4	Carbon black
13463-67-7	titanium dioxide
67-56-1	methanol

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· **OSHA-Ca (Occupational Safety & Health Administration)**

68911-87-5 ALKYL QUATERNARY AMMONIUM MONTMORILLONITE

- **GHS label elements** The product is classified and labelled according to the Globally Harmonized System (GHS).
- **Hazard pictograms** GHS02, GHS07, GHS08
- **Signal word** Danger
- **Hazard-determining components of labelling:**
toluene
- **Hazard statements**
Extremely flammable aerosol.
May be harmful if inhaled.
Causes skin irritation.
Suspected of damaging fertility or the unborn child.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.
Harmful to aquatic life with long lasting effects.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Pressurized container: Do not pierce or burn, even after use.
Do not breathe dust/fume/gas/mist/vapours/spray.
Store locked up.
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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
- **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
ICAO: International Civil Aviation Organization
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