

1 Identification

- **Product identifier**
- **Trade name:** 39101 & 39104 TPO-Direct Bumper Coaters
- **Article number:** 39101, 39104
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **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:** CHEMTREC 1-800-424-9300

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

H225 Highly flammable liquid and vapour.



GHS08 Health hazard

H361 Suspected of damaging fertility or the unborn child.

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



GHS07

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

- **Label elements**

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

- **Hazard pictograms**



GHS02



GHS07



GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

toluene

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Hazard statements

- H225 Highly flammable liquid and vapour.
- H315 Causes skin irritation.
- H361 Suspected of damaging fertility or the unborn child.
- H336 May cause drowsiness or dizziness.
- H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- 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.

Classification system:

NFPA ratings (scale 0 - 4)



HMIS-ratings (scale 0 - 4)



Other hazards

Results of PBT and vPvB assessment

- PBT:** Not applicable.
- vPvB:** Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

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

Dangerous components:

108-88-3	toluene ⚠ H225; ⚠ H361; H373; H304; ⚠ H315; H336	60 - 70%
1333-86-4	Carbon black ⚠ H315; H319; H335	5 - 7%
110-19-0	isobutyl acetate ⚠ H225	1.5 - 5%
110-82-7	cyclohexane ⚠ H225; ⚠ H304; ⚠ H315; H336	1.5 - 5%
	Polyester Plasticizer ⚠ H315; H319	1.5 - 5%

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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. Then consult a doctor.
- **After swallowing:** If symptoms persist consult 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, 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.
- **Advice for firefighters**
- **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:**
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:**
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
- **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

- **Precautions for safe handling**
No special measures required.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.

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- **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.
- **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:**

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 Long-term value: 75 mg/m³, 20 ppm
BEI

1333-86-4 Carbon black

PEL Long-term value: 3.5 mg/m³

REL Long-term value: 3.5* mg/m³
*0.1 in presence of PAHs; See Pocket Guide Apps.A+C

TLV Long-term value: 3* mg/m³
*inhalable fraction

110-19-0 isobutyl acetate

PEL Long-term value: 700 mg/m³, 150 ppm

REL Long-term value: 700 mg/m³, 150 ppm

TLV Long-term value: 713 mg/m³, 150 ppm

110-82-7 cyclohexane

PEL Long-term value: 1050 mg/m³, 300 ppm

REL Long-term value: 1050 mg/m³, 300 ppm

TLV Long-term value: 344 mg/m³, 100 ppm

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· **Ingredients with biological limit values:**

108-88-3 toluene

BEI	0.02 mg/L Medium: blood Time: prior to last shift of workweek Parameter: Toluene
	0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene
	0.3 mg/g creatinine Medium: urine Time: end of shift Parameter: o-Cresol with hydrolysis (background)

· **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.
- 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

· **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

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Liquid
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:	110 °C

· Flash point: 4 °C

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 535 °C

· 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:	7.0 Vol %

· Vapor pressure at 20 °C: 29 hPa

· Density at 20 °C: 0.95 g/cm³

· Relative density: Not determined.

· Vapour density: Not determined.

· Evaporation rate: Not determined.

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic:	Not determined.
Kinematic:	Not determined.

· Solvent content:

Organic solvents: 74.5 %

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VOC content:	74.5 % 750.0 g/l / 6.26 lb/gl
Solids content:	25.5 %
Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **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.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **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)

- **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 internally approved calculation methods for preparations:
Irritant

- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)		
108-88-3	toluene	3
1333-86-4	Carbon black	2B
67-63-0	propan-2-ol	3

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **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.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

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, ADR, IMDG, IATA | UN1263 |
| · UN proper shipping name | |
| · DOT | Paint |
| · ADR | 1263 Paint, ENVIRONMENTALLY HAZARDOUS, special provision 640D |
| · IMDG | PAINT (CYCLOHEXANE), MARINE POLLUTANT |
| · IATA | PAINT |
| · Transport hazard class(es) | |
| · DOT | |
|  | |
| · Class | 3 Flammable liquids. |

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· Label	3
· ADR, IMDG	
 	
· Class	3 Flammable liquids
· Label	3
· IATA	
	
· Class	3 Flammable liquids.
· Label	3
· Packing group	
· DOT, ADR, IMDG, IATA	II
· Environmental hazards:	Product contains environmentally hazardous substances: cyclohexane
· Marine pollutant:	Yes Symbol (fish and tree)
· Special marking (ADR):	Symbol (fish and tree)
· Special precautions for user	Warning: Flammable liquids
· EMS Number:	F-E,S-E
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
· Remarks	ORM-D 49CFR 173.150,156,306
· UN "Model Regulation":	UN1263, Paint, special provision 640D, ENVIRONMENTALLY HAZARDOUS, 3, II

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
110-82-7	cyclohexane
67-63-0	propan-2-ol

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

108-88-3	toluene
1333-86-4	Carbon black
110-19-0	isobutyl acetate
110-82-7	cyclohexane
67-63-0	propan-2-ol
25068-38-6	bisphenolA(chloro)oxirane polymer

· **Proposition 65**

· **Chemicals known to cause cancer:**

1333-86-4	Carbon black
25068-38-6	bisphenolA(chloro)oxirane polymer

· **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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· **Carcinogenity categories**

· **EPA (Environmental Protection Agency)**

108-88-3	toluene	II
110-82-7	cyclohexane	I

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

108-88-3	toluene	A4
1333-86-4	Carbon black	A4
67-63-0	propan-2-ol	A4

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

1333-86-4	Carbon black
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· **OSHA-Ca (Occupational Safety & Health Administration)**

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 GHS07 GHS08

· **Signal word** Danger

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

toluene

· **Hazard statements**

- H225 Highly flammable liquid and vapour.
- H315 Causes skin irritation.
- H361 Suspected of damaging fertility or the unborn child.
- H336 May cause drowsiness or dizziness.

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

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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.

· 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.

· Department issuing MSDS: *Environment protection department.*

· Contact: *Steve Gaver*

· 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 Organization

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent