



# Safety Data Sheet

TD COAT RT

Section 1 : Identification	
<b>Product name :</b> TD COAT RT	<b>Others means of identification :</b>
<b>Recommended use of the chemical and restrictions on use :</b>  Putty formulated to be used in composites and fiberglass industry.	<b>Supplier's details :</b>  Tru-Design 7741 Maynardville Hwy Knoxville, TN 37938 (800) 285-9030
<b>EMERGENCY PHONE NUMBER (24h)</b> (865) 279-9817	

Section 2 : Hazard Identification			
Category	Signal words	Hazard statement	Precautionary statement
Category 3	Warning	<b>H226</b> Flammable liquid and vapor	<b>P210</b> Keep away from heat/sparks/open flames/hot surface. No smoking. <b>P233</b> Keep container tightly closed. <b>P235</b> Keep cool. <b>P240</b> Ground/Bond container and receiving equipment. <b>P242</b> Use only non-sparkling tools. <b>P243</b> Take precautionary measures against static discharge.
Category 4	Warning	<b>H332</b> Harmful if inhaled  <b>H302</b> harmful if swallowed	<b>P261</b> Avoid breathing dust/fume/gas/mist/vapours/spray. <b>P270</b> Do not eat, drink or smoke when using this product. <b>P271</b> Use only outdoors or in well-ventilated area.  <b>P312</b> Call a POISON CENTER or a doctor if you feel unwell <b>P330</b> Rinse your mouth.
Category 1	Warning	<b>H317</b> May Causes skin allergic reactions	<b>P260</b> Do not breathe dust/fumes/gas/mist/vapours/sprays <b>P261</b> Avoid breathing dust/fume/gas/mist/vapours/spray. <b>P264</b> Wash hands thoroughly after handling. <b>P272</b> Contaminated work clothing should not be allowed out of the workplace. <b>P280</b> Wear protective gloves/clothing and personal protective equipment.
Category 2	Warning	<b>H315</b> Causes skin irritation  <b>H319</b> Causes eye irritation  <b>H351</b> Suspected of causing cancer  <b>H361d</b> Suspected of damaging the unborn child  <b>H373</b> May cause damage to organs through prolonged exposure	<b>P352 P302</b> Wash skin with soap and water <b>P310</b> Seek a doctor  <b>P337</b> If irritation persists: seek medical advice <b>P201</b> Obtain special instruction before use.  <b>P202</b> Do no handle until all safety precautions have been read and understood. <b>P260</b> Do not breathe dust/fumes/gas/mist/vapours/sprays <b>P264</b> Wash hands thoroughly after handling. <b>P270</b> Do not eat, drink or smoke when using this product. <b>P272</b> Contaminated work clothing should not be allowed out of the workplace.  <b>P280</b> Wear protective gloves/clothing and personal protective equipment. <b>P284</b> Wear respiratory protection.



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## Section 3 : Composition /Information on ingredients

Chemical identity of the substance	CAS Number	Percentage ( % )
Styrene Monomer	000100-42-5	28-34

## Section 4 : First-aid measures

<b>Inhalation</b>	Remove victim to fresh air, give artificial respiration or give oxygen. Call a physician immediately. Risk of pulmonary aspiration in case of serious accident.
<b>Eye contact</b>	Rinse immediately with plenty of water for at least 15 minutes. Remove contact lenses if applicable. Diphoterine type solutions can replace water. A constant feeling of sand grain or persistent redness requires specialized medical advice. Call a physician.
<b>Skin contact</b>	Depending on the degree of gravity, wash with soap and water. Remove contaminated clothing. If irritation develops, consult a physician. Treat severe redness by Biafine type products. Consult a physician.
<b>Ingestion</b>	Do not induce vomiting, rinse mouth. Consult a physician.

## Section 5 : Fire-fighting measures

**Suitable extinguishing media :** foam, carbon dioxide, dry chemicals.

**Specific hazards arising from the chemical :** On combustion, styrene releases carbon, carbon monoxide and carbon dioxide.

**Special protective actions for fire-fighter :** Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible auto-ignition or explosion when exposed to extreme heat.

## Section 6 : Accidental release measures

**Personal precautions, protective equipment and emergency procedures :**

Remove all sources of ignition (flames, hot surfaces and electrical, static, or friction sparks). Avoid breathing vapours. Ventilate area. Attention ! Contaminated absorbent or used absorbent may heat and ignite a fire. Keep it outside and put some water in the container.

**Environmental precautions :** When there is a spill, in presence of water, the styrene will float because specific gravity is lower than water. Styrene is weakly soluble in water. However, resin and gelcoat have specific gravity higher than 1.

**Methods and materials for containment and cleaning up:** Contain and remove with inert absorbent and non-sparking tools.

## Section 7 : Handling and Storage

**Precautions for safe handling :**

Do not store above 100°F (37.8°C). Keep away from heat, sparks and flame. Keep containers closed when not in use and upright to prevent leakage. Wash hands after using and before smoking or eating.

**Conditions for safe storage, including any incompatibilities :**

Containers should be grounded when pouring. Wash hands after using and before smoking or eating. Emptied containers may retain hazardous residue and explosive vapours. Keep away from heat, sparks and flames. Do not cut, puncture or weld on or near emptied containers. Follow all hazard precautions given in this data sheet until container is thoroughly cleaned or destroyed. Do not mix residues of this product with any other petroleum wastes.



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## Section 8 : Exposure controls/ personal protection

Product	CAS number	Quebec (CSST)		Ontario		Manitoba (ACGIH)		Nova Scotia (ACGIH)	
		Exposure 8h/day	Exposure 15 min/day	Exposure 8h/day	Exposure 15min/day	Exposure 8h/day	Exposure 15min/day	Exposure 8h/day	Exposure 15min/day
Styrène	100-42-5	50 ppm	100 ppm	35 ppm	100 ppm	20 ppm	40 ppm	20 ppm	40 ppm

**Appropriate engineering controls :** Use this product with good ventilation to keep vapour concentration at 50 ppm or less mean concentration for 8 hours.

### Individual protection measures, such as personal protective equipment (PPE)

**Respiratory protection :** Wear a cartridge or autonomous respirator if the concentration in ppm exceeds recommended exposure standard. These devices, however, require that the user has received appropriate training.

**Skin protection :** Wear long-sleeved overalls or coveralls.

**Gloves:** Wear gloves of butyl or nitrile.

**Eye/face protection :** Use safety eyewear with splash guards or side shields, chemical goggles or face shields.

## Section 9 : Physical and chemical properties

### Physical properties

Appearance	transparent liquid
Odour	aromatic
Viscosity	N/D

### Chemical properties

Partition coefficient: n-octanol/water	0,00112	Melting point	-30.6°C
Relative density g/cm cube	1,29 – 1,34	Odour threshold	0.14 ppm
Vapour density	3,6	Initial boiling Point	145°C
Explosibility	Vapors may form an explosive mixture with air.	Flash point	32°C (Pensky-Marten (styrene))
Flammability	Flammable liquid	Solubility(ies)	0.29 g/litre @ 20°C 0.32 g/litre @ 25°C
Lower flammability limit	1.1% by volume	Evaporation rate	N/A
Upper flammability limit	6.1% by volume	Vapour pressure	4.5 mm Hg à 20°C (0.600 kPa)
pH	N/A	Auto-ignition temperature	490°C
Freezing Point	N/A	Decomposition temperature	N/A



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Section 10 : Stability and reactivity	
<b>Reactivity</b>	The product is not considered self-reactive
<b>Possibility of hazardous reactions</b>	Hazardous polymerization : may occur with an exothermic reaction
<b>Chemical stability</b>	Unstable under certain conditions.
<b>Conditions to avoid</b>	elevated temperatures. Improper addition of promoter and/or catalyst. Avoid direct contact of methylethylketone peroxide catalyst (MEKP) with accelerator( cobalt, calcium, potassium's salts). If an accelerator such as cobalt drier has to be added, mix this accelerator with base material before adding catalyst.
<b>Incompatible materials</b>	oxidizers, peroxides, strong acids
<b>Hazardous decomposition products</b>	thermal decomposition or combustion can produce fumes containing organic acids, carbon dioxide and carbon monoxide.

Section 11 : Toxicological information		
<b>Information on the likely routes of exposure :</b> Can be absorbed through the respiratory, digestive, skin and eyes.		
<b>Acute exposition effects :</b> May cause central nervous system depression causing headache, nausea, vomiting, drowsiness, dizziness and muscle weakness. Inhalation of high concentrations can lead to convulsions, coma and death.		
<b>Chronic exposition effects :</b> Can cause damage to the brain and nervous system such as dizziness, headache and nausea, if exposure continues, loss of consciousness occurs with possible damage to the liver and kidneys.		
<b>Irritation :</b> May cause lesions to skin, redness and pain in eyes.		
<b>Sensitization:</b> May rarely cause occupational asthma. Skin sensitization is also very rare.		
<b>Carcinogenicity :</b> Group B . Possibly carcinogenic to humans		
<b>Reproductive toxicity :</b> N/A		
<b>Mutagenicity :</b> N/A		
<b>Interactive effects:</b> . A synergic effect between styrene and diethyl maleate and an antagonistic effect between styrene and methionine had been observed.		
<b>Acute toxicity :</b>	<b>LD50, species, tract</b>	<b>LC50,duration, species</b>
<b>Styrene Monomer</b>	oral : 4,37 g/kg (rat)      dermal : 5g/kg(rabbit)	5000 ppm/ 8 hours (rat)
<b>Methyl methacrylate</b>	N/D	N/D

Section 12 : Ecological information					
<b>Acute aquatic toxicity</b>	<u>Seaweed</u> (Scenedesmus capricornutum) : CEc50 (72h)=4,9 mg/litre	<u>Micro-shellfish</u> (Daphnia magna) : CE50 (48h) = 4,7 mg/litre	<u>Fish</u> (Pimephales promelas) : CL50 (96h) = 4,02 mg/litre	<u>Bacteria</u> (Pseudomonas fluorescens) : NOEC (16h) = 72 mglitre/	<u>Annelides</u> (Eisenia foetida) : CL50 (14j) = 120 mg/kg
<b>Chronic aquatic toxicity</b>	N/A				
<b>Terrestrial toxicity</b>	It is readily biodegradable in soil under aerobic conditions.				
<b>Persistence and degradability</b>	Freshwaters half-life: 15 days. Groundwater half-life: 4 to 30 weeks. Marine waters half-life (estimate): 45 days. In the presence of sea water, styrene will be reduced by volatilization, photo-oxidation and biotransformation.				
<b>Bioaccumulative potential</b>	<u>Octanol-water partition coefficient :</u> Log Kow = 3,02		<u>Bioconcentration factor :</u> Fish= 74      Crab= 12      Goldfish =13,5		
<b>Mobility in soil</b>	Moderate	<b>Other adverse effects</b>	N/A		




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**Section 13 : Disposal considerations**

<b>Disposal methods</b>	Dispose of in accordance with local, provincial and federal regulations. Do not incinerate closed containers. Incinerate in approved facility. Liquid residue must be treated as hazardous waste and disposed in accordance with environmental regulations.
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**Section 14 : Transport information**

<b>UN Number</b>	UN1866
<b>Proper Shipping Name</b>	RESIN SOLUTION
<b>Placard</b>	
<b>Transport hazard class(es)</b>	3
<b>Packing Group</b>	III
<b>Environmental hazards</b>	Not considered as a marine pollutant
<b>Transport in bulk</b>	Possible
<b>Maximum quantity we can ship considering limited quantity exemption Article 1.17 of Canadian TDG Regulation</b>	5.0 litres for packing group III

**Section 15 : Regulatory information**

W.H.M.I.S. CLASSIFICATION	B2 D2A D2B F
NFPA CLASSIFICATION (NFPA 30-2008)	1C
National Building Code of Canada	1C

**Section 16 : Other information**

The information contained in this data sheet is given only as a guide. This data sheet had been prepared in good faith using reliable sources. From our point of view, the information is correct, but not guaranteed. The data sheet is non-exclusive as manipulation and use can vary from one application to another. There is no guarantee and Tru-Design, LLC will not be responsible for losses, faults or damages resulting of the use of the information given in this data sheet.

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