

**MATERIAL SAFETY DATA SHEET**

TC 310 (Adhesive)

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product name : TC 310  
 Product Use : Adhesive, Cold bonding  
 Manufacturer's Address : Thejo Engineering Ltd  
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**2. COMPOSITION / INFORMATION ON INGREDIENTS**

Polychloroprene rubber dispersion in toluene with inorganic fillers

Chemical Name	CAS Number	% Range
Toluene	108-88-3	>80%
ZnO	1314-13-2	<5%
Resin Hydrocarbon	64742-16-1	<5%

**3. HAZARD IDENTIFICATION**

	<b>GHS Classification</b>	<b>Hazardous statement</b>
Flammable Liquids	Category 2	H225
Acute toxicity, dermal	Category 5	H313
Acute toxicity, inhalation	Category 5	H333
Skin corrosion/irritation	Category 2	H315
Eye irritation	Category 2A	H319
Specific target organ toxicity – Single exposure	Category 3	H335
Aspiration hazard	Category 1	H304
Acute aquatic toxicity	Category 1	H400

**Signal word: DANGER**

**GHS Labeling**

Hazard pictograms (CLP):



**Human Health Hazards**

<b>Inhalation:</b>	May be irritating to respiratory tract. Exposure to high concentration may result in headache, loss of coordination, vomiting, wheezing and coughing.
<b>Skin Contact:</b>	Mildly irritating to skin. May be harmful if absorbed through skin
<b>Eyes:</b>	Prolonged or repeated eye contact may result in corneal clouding.
<b>Ingestion:</b>	Exposure to high concentration may result in nausea, vomiting, diarrhea and dizziness

**4. FIRST AID MEASURES**

<b>Eye Contact:</b>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
<b>Skin Contact:</b>	In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
<b>Inhalation:</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Ingestion:</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Seek medical attention. If irritation persists even after the first aid in any of the above case obtain immediate medical advice

**5. FIRE FIGHTING MEASURES**

<b>Extinguishing media:</b>	CO <sub>2</sub> , foam, dry chemicals
<b>Protection of fire-fighters:</b>	Use full protective clothing. Self contained breathing apparatus
<b>Combustion products:</b>	Carbon monoxide, carbon dioxide and other organic compounds

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal precaution:</b>	Wear appropriate protective equipments
<b>Environmental precaution:</b>	Prevent entry to sewers or streams, dike if needed. Prevent contamination of soil. Consult local authorities.
<b>Procedure for clean Up:</b>	Clear all personnel from that area- Keep away from sources of ignition - No smoking. Prevent contamination of waterways. Absorb with an inert dry material and place in an appropriate waste disposal container.

**7. HANDLING AND STORAGE**

<b>Handling:</b>	Flammable. For Industrial Use Only. Avoid contact with eyes, skin and clothing. Do not ingest. Avoid inhalation of chemical. DO NOT handle or store near an open flame, heat, or other sources of ignition. DO NOT pressurize, cut, heat or weld containers. Keep the containers closed when not in use. Protect against physical damage. Use appropriate
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personal protective equipment. Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge ( $\geq 10$  m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations. Extinguish any naked flames.

**Storage:** Store in a cool dry place below 20°C away from direct sunlight and exposure to moisture or water.

**Keep tightly sealed when not in use.**

**Suitable Packing materials:** Keep in steel containers, glass containers.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering measures:** Local exhaust recommended. Explosion protected electrical equipment. Take precautionary measures against static discharges.

**Respiratory protection:** Use an appropriate NIOSH approved respirator

**Gloves:** Impervious gloves. Butyl rubber gloves. Silver Shield(R).

**Skin protection:** Skin contact should be prevented through the use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential.

**Eyes:** Chemical goggles; also wear a face shield if splashing hazard exists.

**Hygienic measures:** When using do not eat, drink or smoke. Wash hands after working with the substance.

### 9. PHYSICAL AND CHEMICAL CHARACTERISTICS

1. Physical State	Liquid
2. Color	Green/Yellow
3. Density @ 0°C	0.90 +/- .05 @ 25°C
4. Viscosity	8 – 10.5 Minutes at 25°C in Ford Cup Method
5. Shelf Life	12 Months, if stored below 20°C
6. Flash Point	4.4°C
7. Boiling point	109-112°C

### 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable under normal conditions

**Hazardous Polymerization:** Will not occur

**Conditions to Avoid:** Direct sparks, flames and other sources of ignition. Do not puncture or incinerate containers

**Materials to Avoid:** Reacts with strong acids, strong bases, alcohols, amines and water.

**Hazardous decomposition products:** Thermal breakdown may produce carbon oxides and traces of incompletely burned carbon compounds.

### 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:** This product may be irritating to the eyes, skin, and respiratory system. This product may cause sensitization in previously exposed individuals and result in contact dermatitis. This product may be absorbed through the skin. Acute inhalation may cause central

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nervous system depression with drowsiness, dizziness, headache, nausea, vomiting, unconsciousness and coma.

Death may occur from respiratory arrest or ventricular fibrillation resulting in primary cardiac failure. Liver and kidney damage may also occur.

**Chronic toxicity:**

Prolonged or repeated liquid contact can result in de-fatting and drying of the skin, which may result in skin irritation and dermatitis. Sensitization may occur. Repeated exposure to the eyes may cause conjunctivitis.

**12. ECOLOGICAL INFORMATION****General:**

Toxic with aquatic life with long lasting effect

**13. DISPOSAL CONSIDERATION****Waste disposal recommendations:**

Waste should be disposed as hazardous waste according to local regulations.

**Waste treatment methods:**

Treatment should be carried out as established for the product, recommending routes of co-processing in cement kilns and incineration.

**14. TRANSPORT INFORMATION**

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

**Shipping Name** : Adhesives containing a flammable liquid  
**UN Number** : 1133  
**Class** : 3  
**Packaging Group** : II

**15. REGULATORY INFORMATIONS**

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Other regulations, limitations and prohibitive regulations

VOC (EU) in %: 80.00 %

VOC (EU) in g/l: 800.0 g/l

Chemical safety assessment: A Chemical Safety Assessment has been carried out.

HIMS RATINGS: HEALTH 2; FIRE 3; REACTIVITY 0

NFPA RATINGS: HEALTH 2; FIRE 3; REACTIVITY 0

**16. OTHER INFORMATION**

*All employees or contractors etc. who use this product must have access to this Safety Data Sheet.*

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*Prepared by* : Thejo engineering ltd.