Section 1 – Identification

Product Identifier  Cataclean
Product Use  Cleaning agent for catalytic converter, oil & residue
Other means of Identification  N/A
Supplier’s Details  Cataclean Americas LLC
6459 Quaker Street
Orchard Park, New York 14127
USA
Manufacturer Details  Cataclean Americas LLC
6459 Quaker Street
Orchard Park, New York, USA, 14127
Emergency Phone Number  1-800-255-3924 Chemtel Inc.

Section 2 – Hazard(s) Identification

WHMIS Classification  B2  D2
Hazard Symbols
Precautionary Statements  Highly Flammable
Harmful by inhalation and in contact with skin
Irritating to eyes and skin
Repeated exposure may cause skin dryness of cracking
Vapours may cause drowsiness and dizziness
Harmful: may cause lung damage if swallowed
Aspiration hazard
Other Hazards  N/A

Section 3 – Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>% (Weight)</th>
<th>LD₅₀ (rat,oral) (mg/kg)</th>
<th>LC₅₀ (rat, inhalation) (ppm/4hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>30-60</td>
<td>4300</td>
<td>5000</td>
</tr>
<tr>
<td>Propan-2-ol</td>
<td>67-63-0</td>
<td>10-30</td>
<td>5045</td>
<td>16000 (ppm/16hr)</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>10-30</td>
<td>5800</td>
<td>50100 mg/m³/8hr</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>64742-47-8</td>
<td>5-10</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
</tbody>
</table>
Section 4 – First Aid Measures

Specific First Aid Measures

**Inhalation**  Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Get medical attention immediately.

**Ingestion**  DO NOT INDUCE VOMITING! Rinse mouth thoroughly. Get medical attention.

**Eyes**  Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eyelids. Continue to rinse for at least 15 minutes. Get medical attention.

**Skin**  Remove contaminated clothing and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

**Special Treatment**  N/Ap

Section 5 – Fire-fighting Measures

**Means of Extinction**  Alcohol resistant foam, carbon dioxide (CO₂), dry chemicals, sand, dolomite, etc. Do not use water jet as an extinguisher, as this will spread the fire.

**Hazardous Combustion Products**  Carbon monoxide, carbon dioxide, reactive hydrocarbons, aldehydes, and other toxic or irritating gases.

**Special Protective Equipment**  Do not enter the area without wearing specialized protective equipment suitable for the situation. Firefighter’s normal protective clothing (Bunker Gear) will not provide adequate protection. Chemical resistant clothing (e.g. chemical splash suit) and positive pressure self-contained breathing apparatus (NIOSH approved or equivalent) must be worn in case of fire.

**Precautionary Measures**  Evacuate the area and fight fire from a safe distance. Approach fire from upwind to avoid hazardous vapours and toxic decomposition products. Stop leak before attempting to put out the fire.

Containers close to fire should be removed immediately or cooled with water. Use water SPRAY to keep fire exposed containers cool and disperse vapours. Keep run-off water out of sewers and water sources. Dike for water control.

**Unusual Fire & Explosion Hazards:**  Vapours are heavier than air and may spread near ground to sources of ignition. May travel considerable distance to the source of ignition and flash back.

Section 6 – Accidental Release Measures

**Personal Precautions**  Wear appropriate protective clothing and respiratory protection (see Section 8).

**Emergency Procedures**  Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. Ventilate area. Extinguish or remove all ignition sources. Avoid sparks, flames, heat and smoking. Activate your emergency response plan according to your company procedures. Notify appropriate government officials according to applicable local, provincial, state and federal requirements.
Section 6 – Accidental Release Measures (cont’)

Leak and Spill Procedures
DO NOT touch spilled material! Stop leak if possible without risk. Absorb with inert, damp, non-combustible material and place into containers. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer. Spilled product must be disposed of in accordance with local, provincial, state and federal regulations.

Environmental Precautions
Do not allow to enter drains, sewers or watercourses.

Section 7 – Handling and Storage

Handling Precautions
Read and follow manufacturer’s recommendations. This material is highly flammable. Personnel should wear appropriate personal protective equipment at all times when using this product. Use in a well-ventilated area, away from the storage area. Keep away from heat, sparks and open flames. Keep containers closed when not in use. Take precautionary measures against static discharge. Avoid inhalation of vapours/spray, skin contact and eye contact. Wash hands after handling.

Storage Conditions
Keep away from oxidizers, heat and flames. May attack some plastics, rubber and coating. Keep in tightly closed containers in a cool, dry, ventilated storage area. Ground container and transfer equipment to eliminate static sparks. This product should be stored away from any incompatible materials (see Section 10).

Special Equipment
N/A

Section 8 – Exposure Controls/Personal Protection

Engineering Controls
Provide adequate ventilation. Use appropriate controls if exposure limits are exceeded. Minimize the risk of inhalation of vapours.

Personal Protective Equipment

Eye Protection
Wear approved safety goggles.

Gloves
Use protective gloves made of polyvinyl alcohol (pva). The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Respirator
Use appropriate respirator if exposure limits are exceeded.

Footwear
Use non-slip footwear.

Clothing
Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Other Protection
Provide eyewash station and safety shower

Exposure Control Limits

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>TLV-TWA (ppm)</th>
<th>TLV- STEL (ppm)</th>
<th>PEL-TWA (ppm)</th>
<th>PEL- STEL (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>100</td>
<td>150</td>
<td>100</td>
<td>150</td>
</tr>
<tr>
<td>Propan-2-ol</td>
<td>67-63-0</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>500</td>
<td>750</td>
<td>750</td>
<td>1000</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>64742-47-8</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
</tbody>
</table>
Section 9 – Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td></td>
</tr>
<tr>
<td>Odour</td>
<td>Aromatic, characteristic</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>N/Av</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Light Blue</td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>-25°C</td>
</tr>
<tr>
<td>Flash Point and Method</td>
<td>24°C, closed cup</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Vapours are flammable</td>
</tr>
<tr>
<td>Solubility (solutions)</td>
<td>Soluble in alcohol</td>
</tr>
<tr>
<td>Viscosity</td>
<td>0.94 mm²/s</td>
</tr>
<tr>
<td>Lower Flammable Limit</td>
<td>N/Av</td>
</tr>
<tr>
<td>Upper Flammable Limit</td>
<td>N/Av</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>N/Av</td>
</tr>
<tr>
<td>Conditions of Flammability</td>
<td>Flammable liquid. Vapours may travel a distance to an ignition source and then flash back to a leak or open container.</td>
</tr>
<tr>
<td><strong>Relative Density</strong></td>
<td>0.815 – 0.835 @ 20°C</td>
</tr>
<tr>
<td><strong>Auto-ignition temp.</strong></td>
<td>N/Av</td>
</tr>
<tr>
<td><strong>Decomposition temp.</strong></td>
<td>N/Av</td>
</tr>
</tbody>
</table>

Section 10 – Stability and Reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoid</td>
<td></td>
</tr>
<tr>
<td>Chemical Stability</td>
<td>Stable at normal temperature conditions and recommended use.</td>
</tr>
<tr>
<td>Chemical Stability</td>
<td>Stable at normal temperature conditions and recommended use.</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td></td>
</tr>
<tr>
<td>Incompatible Materials</td>
<td>Strong acids, halogens, molten sulphur, strong oxidizing agents</td>
</tr>
<tr>
<td>Possibility of Hazardous Reactions</td>
<td>Hazardous polymerization does not occur.</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>Peroxides</td>
</tr>
</tbody>
</table>

Section 11 – Toxicological Properties

<table>
<thead>
<tr>
<th>Route of Entry</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>Irritation of eyes and mucous membranes</td>
</tr>
<tr>
<td>Skin</td>
<td>Irritating to skin. Repeated exposure may cause skin dryness and cracking.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Central nervous system depression. Minimal toxicity</td>
</tr>
<tr>
<td>Ingestion</td>
<td>May cause discomfort if swallowed. May cause stomach pain or vomiting. Pneumonia may be the result if vomited material containing solvents reaches the lungs.</td>
</tr>
<tr>
<td>Target Organs</td>
<td>Blood, central nervous system, eyes, gastro-intestinal tract, kidneys, liver, respiratory system, lungs, skin</td>
</tr>
<tr>
<td>Effects of Exposure</td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td>Inhaling product vapours can cause an initial excitation followed by depression, drowsiness and unconsciousness at approximately 2000 ppm</td>
</tr>
<tr>
<td>Chronic</td>
<td>Repeated or prolonged skin contact can cause drying and cracking of the skin (dermatitis)</td>
</tr>
</tbody>
</table>
Section 11 – Toxicological Properties (cont’)

Toxicity Values

See Section 2 ingredients

Irritancy of Product

Irritant to eyes and skin

Sensitization to Product

N/Av

Carcinogenicity

None of the ingredients are listed as a suspected or known carcinogen on IARC

Teratogenicity

One of the ingredients has shown fetotoxic effects in animals, in the absence of maternal toxicity.

Reproductive Toxicity

None of the ingredients listed are known to cause reproductive toxicity

Mutagenicity

None of the ingredients listed are known to cause mutagenicity

Synergistic Products

Potentially carbon tetrachloride, benzene, toluene and ethanol.

Section 12 – Ecological Information

Note: The product components are not classified as environmentally hazardous, according to the EU Regulation (EC) No. 1907/2006. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Ecotoxicity

N/Av

Persistence and Degradability

N/Av

Bioaccumulative Potential

N/Av

Mobility in Soil

N/Av

Other Adverse Effects

N/Av

Section 13 – Disposal Considerations

Disposal Method

Dispose of all waste and residues in accordance with local, provincial, state and federal waste regulations.

Waste Residues

Regulated as hazardous waste.

Section 14 – Transport Information

Transportation Classification

TDG (Canada)

UN1993, Flammable Liquid, N.O.S. (xylenes), Class 3, PG III

49 CFR (U.S. - Domestic)

Same as above, RQ may apply depending on amount shipped

49 CFR (U.S. - International)

Same as above, RQ may apply depending on amount shipped

ICAO/IATA (Air)

Same as above

IMDG Code (Sea)

Same as above

Marine Pollutant

No

Bulk Transport (by Sea)

N/Ap

Special Precautions

Containers must be grounded prior to transfer of product.
## Section 15 – Regulatory Information

**Canada**  
**WHMIS**  
This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all the information required by the *Controlled Products Regulations*.

**United States**  
**29 CFR (OSHA)**  
Meets the criteria for a hazardous material, as defined by 29 CFR 1910.1200

**California Prop 65**  
None of the ingredients are listed in Prop 65.

## Section 16 – Other Information

**Prepared by**  
**Name**  
Chrim Middleton, Monarch Regulatory Services Inc.

**Title**  
Consultant

**Phone Number**  
c/o Cataclean Americas, Greg Gannon 716-997-7233

**Date of Preparation**  
May 26, 2010

**Abbreviations**  
N/Ap = Not Applicable  
N/Av = Not Available  
IARC = International Agency for Research on Cancer  
TLV = Threshold Limit Value (ACGIH)  
TWA = Time Weighted Average  
STEL = Short Term Exposure Limit  
PEL = Permissible Exposure Limit (29 CFR)  
ACGIH = American Conference of Governmental Industrial Hygienists  
Temp. = Temperature

**References**  
Manufacturer MSDS Rev 08-2009  
CCOHS Databases  
Chempendium  
RTECs  
Hawley’s Condensed Chemical Dictionary, 11th Edition