1. Product and company identification

1.1 Identification of the substance or preparation:

- Commercial product name: CATALYST T 124 BLUE E (TAP RTV Silicone Blue Catalyst)
- Use of substance / preparation: Industrial. Catalysts

1.2 Company/undertaking identification:

- Manufacturer/distributor: Wacker Chemical Corporation
  3301 Sutton Road
  Adrian, MI 49221-9397
  USA

- Customer information:
  InfoLine:
  Tel (517) 264-8240, Fax (517) 264-8740
  Hours of operation:
  Monday - Friday, 8 am to 5 pm (eastern standard time)
  Corporate website: www.wacker.com

- Emergency telephone no. (24h):
  (517) 264-8500
- Transportation emergency:
  (800) 424-9300 (CHEMTREC, USA)
  (703) 527-3887 (CHEMTREC, international)

This SDS was prepared by the Regulatory Affairs and Product Safety Department (RAPS) of Wacker Chemical Corporation.

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (GHS):

<table>
<thead>
<tr>
<th>Class</th>
<th>Category</th>
<th>Route of exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Category 2</td>
<td></td>
</tr>
<tr>
<td>Flammable liquids</td>
<td>Category 3</td>
<td></td>
</tr>
</tbody>
</table>

2.2 Label elements

Labelling (GHS):

- Pictogram(s):
  ![Pictogram]

- Signal Word: Warning

<table>
<thead>
<tr>
<th>H-Code</th>
<th>Hazard Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>H226</td>
<td>Flammable liquid and vapour.</td>
</tr>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure.</td>
</tr>
</tbody>
</table>

- P-Code | Precautionary Statements |
  | P103   | Read label before use. |
  | P210   | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
  | P243   | Take precautionary measures against static discharge. |
  | P280   | Wear protective gloves/protective clothing/eye protection. |
  | P314   | Get medical advice/attention if you feel unwell. |
  | P370+P378 | In case of fire: use water spray, extinguishing powder, foam or carbon dioxide to extinguish. |
  | P403+P235 | Store in a well-ventilated place. Keep cool. |
  | P404   | Store in a closed container. |
  | P501   | Dispose of contents/container to waste disposal. |

2.3 Other hazards

No data available.
3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Type</th>
<th>CAS No.</th>
<th>Substance</th>
<th>Content [wt. %]</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>INHA</td>
<td>682-01-9</td>
<td>Tetrapropyl orthosilicate</td>
<td>&lt;=28.0</td>
<td></td>
</tr>
<tr>
<td>INHA</td>
<td>68299-15-0</td>
<td>Bis(neodecanoyloxy)diocytystannane</td>
<td>&lt;=17.0</td>
<td></td>
</tr>
</tbody>
</table>


Substances listed in the Subsections "HAPS" and "California Proposition 65 Carcinogens / Reproductive Toxins" that are not listed in this section are only present at quantities below 0.1% for California Proposition 65 listed toxins or below 1% for non-carcinogenic HAPS or they are inextricably bound in the product.

4. First-aid measures

4.1 General information:
Get medical attention if irritation occurs or if breathing becomes difficult. Remove contaminated clothing and shoes.

4.2 After inhalation
If inhaled remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen.

4.3 After contact with the skin
For skin contact, immediately wipe away excess material. Use a waterless hand cleaner to remove as much of the remaining material as possible. Wash with soap and water.

4.4 After contact with the eyes
If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min.

4.5 After swallowing
For ingestion, if conscious, give several glasses of water but do not induce vomiting. If vomiting does occur, give additional fluids.

4.6 Advice for the physician
Treat symptomatically.

5. Fire-fighting measures

5.1 Flammable properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point</td>
<td>57 °C (134 °F)</td>
<td>(ASTM D93)</td>
</tr>
<tr>
<td>Sustained combustibility</td>
<td>75 °C (167 °F)</td>
<td>(ASTM D4206)</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>110 - 195 °C (230 - 383 °F)</td>
<td></td>
</tr>
<tr>
<td>Lower explosion limit (LEL)</td>
<td>not determined</td>
<td></td>
</tr>
<tr>
<td>Upper explosion limit (UEL)</td>
<td>not determined</td>
<td></td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>not determined</td>
<td></td>
</tr>
<tr>
<td>NFPA Hazard Class (comb./flam.liquid)</td>
<td>II</td>
<td></td>
</tr>
</tbody>
</table>

5.2 Fire and explosion hazards:
OSHA Combustible liquid and vapor. Vapors are heavier than air and may travel along the ground, be moved by ventilation systems, settle in pits or low areas, and be ignited by ignition sources distant from the handling point. The material is lighter than water, burning spilled material will float on top of any water released from hose or sprinkler systems spreading the fire beyond the initial fire response area. Never use welding or cutting torch on or near any container of this material, even if empty, because an explosion could occur. Hydrolyzes on contact with moisture releasing ignitable vapors.

5.3 Recommended extinguishing media:
AFFF alcohol compatible foam. Carbon dioxide. Dry chemical. Water may be used to cool tanks and structures adjacent to the fire.
5.4 Unsuitable extinguishing media:
Water may be ineffective in controlling fires of this material. Do not use water to fight these fires.

5.5 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases
Hazardous decomposition products: carbon dioxide, carbon monoxide, formaldehyde, silicon dioxide, tin dioxide, nitrogen oxides, Various hydrocarbon fragments

5.6 Fire fighting procedures:
Full turn-out gear and Self Contained Breathing Apparatus (SCBA) should be worn when fighting large fires.

6. Accidental release measures

6.1 Precautions:
Secure the area. Obtain appropriate PPE, supplies, and equipment prior to attempting any response.
HAZWOPER PPE Level: C

6.2 Containment:
Use loose absorbent material or prefabricated socks to dike around small quantities of spilled material (incidental spills). Cover openings to underground drains and sewers. If safe to do so, stop the leak at its source.
Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response Center's toll free phone number (800) 424-8802.

6.3 Methods for cleaning up
Silicone fluids are slippery; spills are a safety hazard. Apply sand or other inert granular material to improve traction. Liquids may be recovered using suction devices or pumps. If flammable, only air driven or properly rated electrical equipment should be used. Use absorbant materials to pick up residual liquids.

7. Handling and storage

7.1 Handling
Precautions for safe handling:
Keep away from heat, sparks and flame. Avoid contact with eyes, skin and clothing. Avoid breathing dust/vapor/mist/gas/aerosol. Use with adequate ventilation. Keep container closed when not in use.

Precautions against fire and explosion:
Do not weld, cut, or grind on empty containers. Keep away from sources of ignition and do not smoke. Ignitable vapors may be released during processing or curing.

7.2 Storage
Conditions for storage rooms and vessels:
Store in a dry and sheltered place.

Advice for storage of incompatible materials:
No restriction.

Further information for storage:
Store in a cool, temperature regulated location.

8. Exposure controls and personal protection

8.1 Engineering controls
Ventilation:
Use with adequate ventilation.

Local exhaust:
To control flammable/combustible vapors: Local exhaust ventilation which meets the requirements of ANSI Z9.2 is recommended to control airborne contaminants at the point of use.
8.2 Associate substances with specific control parameters such as limit values

Maximum airborne concentrations at the workplace:

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Material</th>
<th>Type</th>
<th>mg/m³</th>
<th>ppm</th>
<th>Dust fract.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tin compounds (organic)</td>
<td>OSHA PEL</td>
<td>0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tin compounds (organic)</td>
<td>ACGIH TWA</td>
<td>0.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Re Tin compounds (organic): STEL is 0.2 mg/m³, skin notation (ACGIH).

8.3 Personal protection equipment (PPE)

Respiratory protection:
If spraying or other operations which generate an aerosol mist are conducted, respiratory protection for exposed personnel is recommended. A NIOSH approved air purifying respirator equipped with universal multi-contaminant, multi-gas/vapor cartridges and at least P-99 solid/aerosol particulate filters is recommended if overexposure to dusts, mists, or vapors could occur.

Hand protection:
Any liquid-tight rubber or vinyl gloves.

Eye protection:
Safety glasses with side shields or chemical safety goggles. Additional eye and face protection, splash-proof goggles, hood, full-faced respirator, or face shield is recommended if splashing could occur.

Other protective clothing or equipment:
Additional skin protection, such as SARANEX coated Tyvek apron, over-sleeves, lab coat, coveralls, or protective suit should be worn if splashing could occur. Provide eye bath and safety shower.

8.4 General hygiene and protection measures:

Follow standard industrial hygiene practices when using this material. When handling do not eat, drink, smoke or apply cosmetics. Wash thoroughly after handling.

9. Physical and chemical properties

9.1 Appearance

Physical state / form: liquid
Colour: blue
Odour: characteristic

9.2 Safety parameters

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point / melting range</td>
<td>not applicable</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>110 - 195 °C (230 - 383 °F)</td>
<td>(ASTM D93)</td>
</tr>
<tr>
<td>Flash point</td>
<td>57 °C (134 °F)</td>
<td>(ASTM D4206)</td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>not determined</td>
<td></td>
</tr>
<tr>
<td>Lower explosion limit (LEL)</td>
<td>not determined</td>
<td></td>
</tr>
<tr>
<td>Upper explosion limit (UEL)</td>
<td>not determined</td>
<td></td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>not determined</td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>0.964 g/cm³</td>
<td></td>
</tr>
<tr>
<td>Water solubility / miscibility</td>
<td>insoluble</td>
<td></td>
</tr>
<tr>
<td>pH-Value</td>
<td>not applicable</td>
<td></td>
</tr>
<tr>
<td>Viscosity (dynamic)</td>
<td>100 mPa.s</td>
<td></td>
</tr>
</tbody>
</table>

9.3 Further information

Percent Volatiles: 27.20 %

10. Stability and reactivity

10.1 General information:

Stable under normal conditions of use.
10.2 Conditions to avoid
Although this product is not expected to react with commonly used materials of construction and process equipment, it is advised that any rubber or plastic items such as hoses and gaskets be tested prior to large scale processing to ensure there is no degradation of performance or durability.

10.3 Materials to avoid
Oxidizing materials (oxygen, oxidizers, peroxides, etc.), strong acids, alkalis.

10.4 Hazardous decomposition products
Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150 °C (302 °F) through oxidation. n-Propanol is released upon contact with water. Ethanol is released upon contact with water.

10.5 Further information:
Hazardous polymerization cannot occur.

11. Toxicological information

11.1 Information on toxicological effects

11.1.1 General information
Data derived for the product as a whole are of higher priority than data for single ingredients.

11.1.2 Acute toxicity
Assessment:
For this endpoint no toxicological test data is available for the whole product.

Data related to ingredients:
Polydimethyl siloxane:

<table>
<thead>
<tr>
<th>Route of exposure</th>
<th>Result/Effect</th>
<th>Species/Test system</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>oral</td>
<td>LD&lt;sub&gt;50&lt;/sub&gt; &gt; 5000 mg/kg</td>
<td>rat</td>
<td>literature</td>
</tr>
<tr>
<td>dermal</td>
<td>LD&lt;sub&gt;50&lt;/sub&gt; &gt; 2008 mg/kg</td>
<td>rat</td>
<td>literature</td>
</tr>
</tbody>
</table>

11.1.3 Skin corrosion/irritation
Assessment:
For this endpoint no toxicological test data is available for the whole product.

Data related to ingredients:
Polydimethyl siloxane:

<table>
<thead>
<tr>
<th>Result/Effect</th>
<th>Species/Test system</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>not irritating</td>
<td>rabbit</td>
<td>literature</td>
</tr>
<tr>
<td>not irritating</td>
<td>Human skin patch test; Voluntary persons</td>
<td>literature</td>
</tr>
</tbody>
</table>

11.1.4 Serious eye damage / eye irritation
Assessment:
For this endpoint no toxicological test data is available for the whole product.

Data related to ingredients:
Polydimethyl siloxane:

<table>
<thead>
<tr>
<th>Result/Effect</th>
<th>Species/Test system</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>not irritating</td>
<td>rabbit</td>
<td>literature</td>
</tr>
</tbody>
</table>

11.1.5 Respiratory or skin sensitization
Assessment:
For this endpoint no toxicological test data is available for the whole product.
Data related to ingredients:

Polydimethyl siloxane:

<table>
<thead>
<tr>
<th>Route of exposure</th>
<th>Result/Effect</th>
<th>Species/Test system</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>dermal</td>
<td>not sensitizing</td>
<td>guinea-pig; Magnusson-Kligman</td>
<td>literature OECD 406</td>
</tr>
</tbody>
</table>

11.1.6 Germ cell mutagenicity

Assessment:
For this endpoint no toxicological test data is available for the whole product.

Data related to ingredients:

Polydimethyl siloxane:

<table>
<thead>
<tr>
<th>Result/Effect</th>
<th>Species/Test system</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>negative</td>
<td>mutation assay (in vitro) bacterial cells</td>
<td>literature OECD 471</td>
</tr>
</tbody>
</table>

11.1.7 Carcinogenicity

Assessment:
For this endpoint no toxicological test data is available for the whole product.

11.1.8 Reproductive toxicity

Assessment:
For this endpoint no toxicological test data is available for the whole product.

11.1.9 Specific target organ toxicity (single exposure)

Assessment:
For this endpoint no toxicological test data is available for the whole product.

11.1.10 Specific target organ toxicity (repeated exposure)

Assessment:
For this endpoint no toxicological test data is available for the whole product.

11.1.11 Aspiration hazard

Assessment:
For this endpoint no toxicological test data is available for the whole product.

11.1.12 Further toxicological information

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Data related to ingredients:

Product of hydrolysis (Ethanol):
According to literature, ethanol (67-17-5) irritates the mucous membranes, slightly irritates the skin, degreases the skin, is narcotic and may cause liver damage.

12. Ecological information

12.1 Toxicity

Assessment:
According to past experience toxicity to fish is improbable. According to current knowledge adverse effects on water purification plants are not expected.
Data related to ingredients:
Data derived for the product as a whole are of higher priority than data for single ingredients.

**Polydimethyl siloxane:**

<table>
<thead>
<tr>
<th>Result/Effect</th>
<th>Species/Test system</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC&lt;sub&gt;50&lt;/sub&gt;: &gt; 0.0001 mg/l (measured)</td>
<td>static (water-accommodated fraction)</td>
<td>literature</td>
</tr>
<tr>
<td>EC&lt;sub&gt;50&lt;/sub&gt;: &gt; maximum achievable concentration</td>
<td>Daphnia magna (48 h)</td>
<td>literature</td>
</tr>
<tr>
<td>IC&lt;sub&gt;50&lt;/sub&gt; (growth rate): &gt; 100000 mg/l (nominal)</td>
<td>Marine alga (skeletonema costatum) (72 h)</td>
<td>literature</td>
</tr>
<tr>
<td>NOEC: &gt; 10000 mg/kg</td>
<td>feeding study</td>
<td>literature</td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability

**Assessment:**
Contact with water liberates propanol, ethanol and silanol- and/or siloxanol-compounds.

**Data related to ingredients:**

**Polydimethyl siloxane:**
Not readily biodegradable. Polydimethylsiloxanes are degradable to a certain extent in abiotic processes.

**Product of hydrolysis (Ethanol):**
The hydrolysis product (Ethanol) is readily biologically degradable.

12.3 Bioaccumulative potential

**Assessment:**
For the product as a whole, no test data is available.

12.4 Mobility in soil

**Assessment:**
Insoluble in water.

12.5 Other adverse effects
none known

13. Disposal considerations

13.1 RCRA Waste Classification:
D001 (Ignititable)
This classification applies only to the material as it was originally produced.

13.2 Product disposal

**Recommendation:**
Material that cannot be used or chemically reprocessed should be disposed of at an approved facility in accordance with any applicable governmental regulations. State and local regulations may be more stringent than Federal regulations.

13.3 Packaging disposal

**Recommendation:**
Uncleaned containers should not be reused to hold another material due to the potential for reaction between residual product and incompatible materials. Uncleaned packaging should be treated with the same precautions as the material. After emptying contaminated containers may be cleansed and recycled.

14. Transport information

14.1 US DOT & CANADA TDG SURFACE

**Valuation** ..............................................: Not regulated for transport
**Other Information** .................................: This material has been tested and does not sustain combustion.

14.2 Transport by sea IMDG-Code

**Valuation** ..............................................: Not regulated for transport
Comment: Not regulated in Class 3 - IMDG 2.3.1.3 - Substance does not sustain combustion!

14.3 Air transport ICAO-TI/IATA-DGR

Valuation: Not regulated for transport
Comment: Not regulated in Class 3 - IATA 3.3.1.3 / ICAO 3.1.3 - Substance does not sustain combustion!

15. Regulatory information

15.1 U.S. Federal regulations

TSCA inventory status and TSCA information:
This material or its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory.

TSCA 12(b) Export Notification:
This material does not contain any TSCA 12(b) regulated chemicals.

CERCLA Regulated Chemicals:
This material does not contain any CERCLA regulated chemicals.

SARA 302 EHS Chemicals:
This material does not contain any SARA extremely hazardous substances.

SARA 311/312 Hazard Class:
Fire hazard. Immediate (acute) health hazard. Delayed (chronic) health hazard.

SARA 313 Chemicals:
This material does not contain any SARA 313 chemicals above de minimus levels.

HAPS (Hazardous Air Pollutants):
This material does not contain any hazardous air pollutants.

15.2 U.S. State regulations

California Proposition 65 Carcinogens:
This material does not contain any chemicals known to the state of California to cause cancer.

California Proposition 65 Reproductive Toxins:
This material does not contain any chemicals known to the State of California to cause reproductive effects.

Massachusetts Substance List:
This material contains no listed components.

New Jersey Right-to-Know Hazardous Substance List:
This material contains no listed components.

Pennsylvania Right-to-Know Hazardous Substance List:
This material contains no listed components.

15.3 Canadian regulations

This product has been classified in accordance with the Hazard criteria of the CPR and the SDS contains all the information required by the CPR.

WHMIS Hazard Classes:
B3, D2B, D2A

Non-DSL Chemicals:

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Chemical</th>
<th>Upper limit wt. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>None Assigned</td>
<td>Tetra propyl silicate, hydrolysis products</td>
<td>0.278</td>
</tr>
</tbody>
</table>

15.4 Details of international registration status

Relevant information about individual substance inventories, where available, is given below.

South Korea (Republic of Korea) : ECL (Existing Chemicals List):
This product is listed in, or complies with, the substance inventory.

Australia : AICS (Australian Inventory of Chemical Substances):
This product is listed in, or complies with, the substance inventory.
People's Republic of China ........................................... : IECSC (Inventory of Existing Chemical Substances in China): This product is listed in, or complies with, the substance inventory.
Canada ................................................................. : DSL (Domestic Substance List): This product is listed in, or complies with, the substance inventory.
Philippines .............................................................. : PICCS (Philippine Inventory of Chemicals and Chemical Substances): This product is listed in, or complies with, the substance inventory.
United States of America (USA) ..................................... : TSCA (Toxic Substance Control Act Chemical Substance Inventory): This product is listed in, or complies with, the substance inventory.
European Economic Area (EEA) ....................................... : REACH (Regulation (EC) No 1907/2006):
General note: the registration obligations for substances imported into the EEA or manufactured within the EEA by the supplier mentioned in section 1 are fulfilled by the said supplier. The registration obligations for substances imported into the EEA by customers or other downstream users must be fulfilled by the latter.

16.  Other information

16.1 Additional information:

This Safety Data Sheet (SDS) meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR. This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee expressed or implied, is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license under valid patents. This SDS provides selected regulatory information on this product, including its components. This is not intended to include all regulations. It is the responsibility of the user to know and comply with all applicable rules, regulations and laws relating to the product being used.

Vertical lines in the left-hand margin indicate changes compared with the previous version.

All deliveries are subject to the WACKER SILICONES Health Care Policy, which is available at www.wacker.com.

16.2 Glossary of Terms:

ACGIH - American Conference of Governmental Industrial Hygienists
DOT - Department of Transportation
hPa - Hectopascals
mPa*s - Milli Pascal-Seconds
OSHA - Occupational Safety and Health Administration
PEL - Permissible Exposure Limit

Common name
ppm - Parts per Million
SARA - Superfund Amendments and Reauthorization Act
STEL - Short Term Exposure Limit
TWA - Time Weighted Average
WHMIS - Canadian Workplace Hazardous Materials

Flash point determination methods ........................................
ASTM D56 .................................................................: Tagliabue (Tag) closed cup
ASTM D92, DIN 51376, ISO 2592 ....................................: Cleveland open cup
ASTM D93, DIN 51758, ISO 2719 .....................................: Pensky-Martens closed cup
ASTM D3278, DIN 55680, ISO 3679 ....................................: Setaflash or Rapid closed cup
DIN 51755 .................................................................: Abel-Pensky closed cup

16.3 Conversion table:

Pressure: ...........................................: 1 hPa * 0.75 = 1 mm Hg = 1 torr; 1 bar = 1000 hPa
Viscosity: ...........................................: 1 mPa*s = 1 centipoise (cP)