WACKER

Safety Data Sheet

Material: 60055987 **CATALYST T 124 BLUE E**

Version: 2.1 (US) Date of print: 06/06/2016 Date of last alteration: 06/22/2015

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

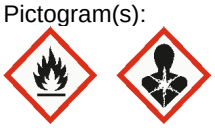
Classification (GHS):

Class	Category	Route of exposure
Specific target organ toxicity (repeated exposure)	Category 2	
Flammable liquids	Category 3	

2.2 Label elements

Labelling (GHS):

Pictogram(s):



Signal Word: Warning

H-Code	Hazard Statements
H226	Flammable liquid and vapour.
H373	May cause damage to organs through prolonged or repeated exposure.

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

Type	CAS No.	Substance	Content [wt. %]		Note
			Lower	Upper	
INHA	682-01-9	Tetrapropyl orthosilicate		<=28.0	
INHA	68299-15-0	Bis(neodecanoyloxy)dioctylstannane		<=17.0	

Type: HYD - by-product upon hydrolysis, INHA - ingredient, NEBE - by-product, MONO - residual monomer, VERU - impurity, VUL - by-product upon vulcanization. *** **Note:** C1 - IARC carcinogen, C2 - NTP carcinogen, C3 - OSHA carcinogen, NH - non-hazardous, R - reproductive toxin.

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:

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

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 controling 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 absorbant 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:

CAS No.	Material	Type	mg/m³	ppm	Dust fract.
	Tin compounds (organic)	OSHA PEL	0.1		
	Tin compounds (organic)	ACGIH TWA	0.1		

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

Property:		Value:	Method:
Melting point / melting range	:	not applicable	
Boiling point / boiling range	:	110 - 195 °C (230 - 383 °F)	
Flash point	:	57 °C (134 °F)	(ASTM D93)
Sustained combustibility	:	75 °C (167 °F)	(ASTM D4206)
Ignition temperature	:	not determined	
Lower explosion limit (LEL)	:	not determined	
Upper explosion limit (UEL)	:	not determined	
Vapour pressure	:	not determined	
Density	:	0.964 g/cm³	
Water solubility / miscibility	:	insoluble	
pH-Value	:	not applicable	
Viscosity (dynamic)	:	100 mPa.s	

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:

Route of exposure	Result/Effect	Species/Test system	Source
oral	LD_{50}: > 5000 mg/kg	rat	literature
dermal	LD_{50}: > 2008 mg/kg	rat	literature

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:

Result/Effect	Species/Test system	Source
not irritating	rabbit	literature
not irritating	Human skin patch test; Voluntary persons	literature

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:

Result/Effect	Species/Test system	Source
not irritating	rabbit	literature

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:

Route of exposure	Result/Effect	Species/Test system	Source
dermal	not sensitizing	guinea-pig; Magnusson-Kligman	literature OECD 406

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:

Result/Effect	Species/Test system	Source
negative	mutation assay (in vitro) bacterial cells	literature OECD 471

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:

Result/Effect	Species/Test system	Source
EC_{50}: > 0.0001 mg/l (measured) effect level > maximum achievable concentration	static (water-accommodated fraction) Daphnia magna (48 h)	literature
IC_{50} (growth rate): > 100000 mg/l (nominal)	Marine alga (skeleonema costatum) (72 h)	literature
NOEC: > 10000 mg/kg	feeding study	literature

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 (Ignitable)
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:

CAS No.	Chemical	Upper limit wt. %
None Assigned	Tetra propyl silicate, hydrolysis products	0.278

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
ppm - Parts per Million
SARA - Superfund Amendments and Reauthorization Act
STEL - Short Term Exposure Limit
TSCA - Toxic Substances Control Act
TWA - Time Weighted Average
WHMIS - Canadian Workplace Hazardous Materials Identification System

Flash point determination methods	**Common name**
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)