

Safety Data Sheet

Material: 60078485

WACKER® CATALYST T

Version: 3.0 (INTL-GHS)

Date of print: 28.05.2018

Date of last alteration: 19.05.2016

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Commercial product name:** WACKER® CATALYST T**1.2 Relevant identified uses of the substance or mixture and uses advised against**Use of substance / preparation:
Industrial.
Intermediate chemical .**1.3 Details of the supplier of the safety data sheet**

Manufacturer/distributor:	Wacker Chemie AG
Street/POB-No.:	Hanns-Seidel-Platz 4
State/postal code/city:	D 81737 München
Telephone:	+49 89 6279-0
Telefax:	+49 89 6279-1770

Information about the Safety Data Sheet:	Telephone	+49 8677 83-4888
	Telefax	+49 8677 886-9722
	eMail	WLCP-MSDS@wacker.com

1.4 Emergency telephone number

Emergency Information (German):	Plant fire brigade	+49 8677 83-2222
Emergency Information (internat.):	National Response Center	+49 621 60-43333

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

Class	Category	Route of exposure
Acute toxicity	Category 4	by inhalation
Serious eye damage / eye irritation	Category 2A	
Specific target organ toxicity (single exposure)	Category 3 (respiratory tract irritation)	
Specific target organ toxicity (single exposure)	Category 2	
Flammable liquids	Category 3	

2.2 Label elements

Pictogram(s):



Signal Word: Danger

H-Code	Hazard Statements
H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H371	May cause damage to organs.

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P-Code	Precautionary Statements
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P243	Take precautionary measures against static discharge.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P370+P378	In case of fire: Use water spray, extinguishing powder or carbon dioxide to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to waste disposal.

Hazard ingredients (labelling):

Tetraethyl silicate
Di-n-octyltindodecylate
Dioctyltin carboxylates

2.3 Other hazards

No data available.

SECTION 3: Composition/information on ingredients**3.1 Substances**

not applicable

3.2 Mixtures**3.2.1 Chemical characteristics**

Organotin compound + Silicic acid ester

3.2.2 Hazardous ingredients

EC-No.	CAS No.	Material	Content %
201-083-8	78-10-4	Tetraethyl silicate	<60
222-883-3	3648-18-8	Di-n-octyltindodecylate	<30

SECTION 4: First aid measures**4.1 Description of first aid measures****General information:**

Take persons to a safe place. Observe self-protection for first aid.

After contact with the eyes:

Rinse immediately with plenty of water for 10-15 minutes. Keep eyelids well open to rinse the whole eye surface and eyelids with water. Seek medical advice in case of continuous irritation.

After contact with the skin:

Wipe off excess material with cloth or paper. Remove contaminated or soaked clothing. Immediately rinse with plenty of soap and water. In serious cases, use emergency shower immediately. In the event of a visible skin change or other complaints, seek medical advice (show label or SDS where possible).

After inhalation:

Keep the patient calm. If unconscious place in stable sideways position. Protect against loss of body heat. Seek medical advice and clearly identify substance.

After swallowing:

If conscious, give several small portions of water to drink. Do not induce vomiting. Seek medical advice and clearly identify substance.

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4.2 Most important symptoms and effects, both acute and delayed

Any relevant information can be found in other parts of this section.

4.3 Indication of any immediate medical attention and special treatment needed

Further toxicology information in section 11 must be observed.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

water mist , extinguishing powder , alcohol-resistant foam , carbon dioxide , sand .

Extinguishing media which must not be used for safety reasons:

water jet .

5.2 Special hazards arising from the substance or mixture

Risk of hazardous gasses or fumes in the event of fire. Exposure to combustion products may be a health hazard! Hazardous combustion products: carbon oxides , silicon oxides , incompletely burnt hydrocarbons , toxic and very toxic fumes .

5.3 Advice for firefighters

Special protective equipment for fire fighting:

Use respiratory protection independent of recirculated air. Keep unprotected persons away.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Secure the area. Wear personal protection equipment (see section 8). Keep unprotected persons away. Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. If material is released indicate risk of slipping. Do not walk through spilled material.

6.2 Environmental precautions

Prevent material from entering surface waters, drains or sewers and soil. Close leak if possible without risk. Contain any fluid that runs out using suitable material (e.g. earth). Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers. Inform authorities if substance leaks into surface waters, sewerage or ground.

6.3 Methods and material for containment and cleaning up

Take up mechanically and dispose of according to local/state/federal regulations. Do not flush away with water. For small amounts: Absorb with a neutral (non-acidic / non-basic) liquid binding material such as diatomaceous earth and dispose of according to government regulations. For large amounts: Liquids may be recovered using suction devices or pumps. If flammable, only air driven or properly rated electrical equipment should be used. Clean any slippery coating that remains using a detergent / soap solution or another biodegradable cleaner. Silicone fluids are slippery; spills are a safety hazard. Apply sand or other inert granular material to improve traction.

Further information:

Exhaust vapours. Eliminate all sources of ignition. Consider explosion protection. Observe notes under section 7.

6.4 Reference to other sections

Relevant information in other sections has to be considered. This applies in particular for information given on personal protective equipment (section 8) and on disposal (section 13).

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling:

Ensure adequate ventilation. Must be syphoned off in situ. Spilled substance increases risk of slipping. Avoid formation of aerosols. In case of aerosol formation special protective measures are required (exhausting by suction, respiratory protection). Observe information in section 8. Keep away from incompatible substances in accordance with section 10.

Safety Data Sheet

Material: 60078485

WACKER® CATALYST T

Version: 3.0 (INTL-GHS)

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Precautions against fire and explosion:

Flammable vapors may accumulate and form explosive mixtures with air in containers, process vessels, including partial, empty and uncleaned containers and vessels, or other enclosed spaces. Keep away from sources of ignition and do not smoke. Take precautionary measures against electrostatic charging. Cool endangered containers with water.

7.2 Conditions for safe storage, including any incompatibilities**Conditions for storage rooms and vessels:**

Observe local/state/federal regulations.

Advice for storage of incompatible materials:

Observe local/state/federal regulations.

Further information for storage:

Store in a dry and cool place. Protect against moisture. Store container in a well ventilated place.

Minimum temperature allowed during storage and transportation: 0 °C

Maximum temperature allowed during storage and transportation: 30 °C

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Maximum airborne concentrations at the workplace:**

CAS No.	Material	Type	mg/m ³	ppm	Dust fract.	Fibre/m ³
	Aerosol - respirable fraction		10,0			

The aerosol limit specified is a recommendation should aerosol be formed during processing.

8.2 Exposure controls**8.2.1 Exposure in the work place limited and controlled****General protection and hygiene measures:**

Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. Do not eat, drink or smoke when handling. Wash hands at the end of work and before eating.

Personal protection equipment:**Respiratory protection**

In case of long or strong exposure: gas mask filter A .

Eye protection

tight fitting protective goggles .

Hand protection

Protective gloves made of butyl rubber , Protective gloves made of nitrile rubber . At any sign of decay or chemical permeability remove gloves immediately and replace. Gloves suitable for up to 60 minutes' use. The selection of appropriate gloves not only depends on the material, but also on other quality characteristics, and may vary depending on the manufacturer. Please observe information from your glove supplier in terms of permeability and breakthrough time.

Skin protection

protective clothing .

8.2.2 Exposure to the environment limited and controlled

Prevent material from entering surface waters and soil.

Safety Data Sheet

Material: 60078485

WACKER® CATALYST T

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SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Property:	Value:	Method:
Appearance		
Physical state / form	liquid	
Colour	colourless	
Odour		
Odour	slight	
pH-Value		
pH-Value	not applicable	
Melting point/freezing point		
Melting point / melting range	not determined	
Initial boiling point and boiling range		
Boiling point / boiling range	160 - 161 °C at 1013 hPa	
Flash point		
Flash point	38 °C	(DIN 51755)
Upper/lower flammability or explosive limits		
Lower explosion limit (LEL)	not applicable	
Upper explosion limit (UEL)	not applicable	
Vapour pressure		
Vapour pressure	approx. 1 hPa at 20 °C	
Solubility(ies)		
Water solubility / miscibility	virtually insoluble	
Vapour density		
Relative gas/vapour density	No data known.	
Relative Density		
Relative Density	approx. 0,97 (20 °C) (Water / 4 °C = 1,00)	(DIN 51757)
Density	approx. 0,97 g/cm ³ (20 °C)	(DIN 51757)
Partition coefficient: n-octanol/water		
Partition coefficient: n-octanol/water	No data known.	
Auto-ignition temperature		
Ignition temperature	245 °C	(DIN 51794)
Decomposition temperature		
Thermal decomposition	not applicable	
Viscosity		
Viscosity (dynamic)	approx. 2 mPa.s at 23 °C	(-)

9.2 Other information

Re 9.2 solubility in water: Hydrolytic decomposition occurs. Hydrolysis products reduce the flash point.

SECTION 10: Stability and reactivity**10.1 – 10.3 Reactivity; Chemical stability; Possibility of hazardous reactions**

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

Relevant information can possibly be found in other parts of this section.

10.4 Conditions to avoid

moisture

10.5 Incompatible materials

Reacts with: water , basic substances and acids . Reaction causes the formation of: alcohols .

10.6 Hazardous decomposition products

If stored and handled properly: none known . Under the effect of humidity, water and protic agents: alcohols .

SECTION 11: Toxicological information**11.1 Information on toxicological effects****11.1.1 Acute toxicity****Assessment:**

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

Acute toxicity estimate (ATE):

ATE_{mix} (oral): > 2000 mg/kg

ATE_{mix} (by inhalation / vapour): 14,3 mg/l/4 h

ATE_{mix} (by inhalation / dust/mist): 2 mg/l/4 h

11.1.2 Skin corrosion/irritation**Assessment:**

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

11.1.3 Serious eye damage / eye irritation**Assessment:**

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

11.1.4 Respiratory or skin sensitization**Assessment:**

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

11.1.5 Germ cell mutagenicity**Assessment:**

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

11.1.6 Carcinogenicity**Assessment:**

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

11.1.7 Reproductive toxicity**Assessment:**

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

11.1.8 Specific target organ toxicity (single exposure)**Assessment:**

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

11.1.9 Specific target organ toxicity (repeated exposure)**Assessment:**

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

11.1.10 Aspiration hazard**Assessment:**

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

11.1.11 Further toxicological information

Ethanol (64-17-5) is readily absorbed at all exposure routes. Ethanol may cause irritation of eyes and mucosa, trigger dysfunction of the central nervous system and cause nausea as well as dizziness. Chronic exposure to high amounts of ethanol may cause damage to liver and central nervous system.

Safety Data Sheet

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SECTION 12: Ecological information**12.1 Toxicity****Assessment:**

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

12.2 Persistence and degradability**Assessment:**

Contact with water liberates ethanol and silicic acid.

12.3 Bioaccumulative potential**Assessment:**

Bioaccumulation is not excluded.

12.4 Mobility in soil**Assessment:**

No data known.

12.5 Other adverse effects

none known

SECTION 13: Disposal considerations**13.1 Waste treatment methods****13.1.1 Material****Recommendation:**

Material that cannot be used, reprocessed or recycled should be disposed of in accordance with Federal, State, and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.

13.1.2 Uncleaned packaging**Recommendation:**

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.

SECTION 14: Transport information**14.1 – 14.4 UN number; UN proper shipping name; Transport hazard class(es); Packing group****Road ADR:**

Valuation: Dangerous Goods
14.1 UN no.: 1292
14.2 Proper Shipping Name: Tetraethylsilicat, Lösung
14.3 Class: 3
14.4 Packaging Group: III

Railway RID:

Valuation: Dangerous Goods
14.1 UN no.: 1292
14.2 Proper Shipping Name: Tetraethylsilicat, Lösung
14.3 Class: 3
14.4 Packaging Group: III

Transport by sea IMDG-Code:

Valuation: Dangerous Goods
14.1 UN no.: 1292
14.2 Proper Shipping Name: Tetraethyl silicate solution
14.3 Class: 3

Safety Data Sheet

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14.4 Packaging Group: III

Air transport ICAO-TI/IATA-DGR:

Valuation: Dangerous Goods

14.1 UN no.: 1292

14.2 Proper Shipping Name: Tetraethyl silicate solution

14.3 Class: 3

14.4 Packaging Group: III

14.5 Environmental hazards

Hazardous to the environment: no

Marine Pollutant (IMDG): no

14.6 Special precautions for user

Relevant information in other sections has to be considered.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Bulk transport in tankers is not intended.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

National and local regulations must be observed.

For information on labelling please refer to section 2 of this document.

15.2 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.

Japan: **ENCS** (Handbook of Existing and New Chemical Substances):

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.

Taiwan (Republic of China).....: **TCSI** (Taiwan Chemical Substance Inventory):

This product is listed in, or complies with, the substance inventory. General note:

Taiwan REACH requires a phase 1 registration for TCSI-listed or TCSI-compliant substances if imports to Taiwan or manufacturing in Taiwan exceed the trigger quantity of 100 kg/a (for mixtures to be calculated per each ingredient). It is the duty of the importing/manufacturing legal entity to take care of this obligation.

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.

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SECTION 16: Other information**16.1 Material**

The details in this document are based on the state of our knowledge at the time of revision. They do not constitute an assurance of the described product properties in terms of statutory warranty requirements.

The providing of this document to a recipient does not relieve the recipient of his or her responsibility toward compliance with all laws and stipulations applicable to the product. This applies in particular to the further sale or distribution of the product or substances or items containing the product, in other jurisdictions and with regard to the protection of third-party intellectual property rights. If the described product is processed or mixed with other substances or materials, the details stated in this document cannot be conferred to the resultant new product unless this has been expressly mentioned. If the product is repackaged, the recipient is obligated to additionally provide the required safety-related information.

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

16.2 Further information:

Commas appearing in numerical data denote a decimal point. Vertical lines in the left-hand margin indicate changes compared with the previous version. This version supersedes all previous versions.

Classification	Rationale:
Acute toxicity, Category 4, by inhalation	Calculation method
Serious eye damage / eye irritation, Category 2A	Calculation method
Specific target organ toxicity (single exposure), Category 3 (respiratory tract irritation)	Calculation method
Specific target organ toxicity (single exposure), Category 2	Calculation method
Flammable liquids, Category 3	Test data

- End of Safety Data Sheet -