

Trade name: Sitran-O hardener
Safety data sheet in accordance with (EG) Nr. 1907 / 2006
 Date of printing : 10.12.2010

01. Identification

Product details	
Trade name	Sitran-O hardener
Application of the material / of the formulation	
Identification of the manufacturer	
Address	ERKODENT Erich Kopp GmbH, Siemensstr. 3, D-72285 Pfalzgrafenweiler
Information provided by	Chemie
Telephone number	Tel.: (+49) (0) 7445 / 85 01 - 0, Fax: (+49) (0) 7445 / 20 92, e-mail: w.heuchert@erkodent.com
Emergency telephone number :	

02. Hazards possibilities

Hazard designation	Flammable, Harmful by inhalation., Irritating to eyes and respiratory system.
Particular information pertaining specific risk for human / environment	

03. Composition/information on ingredients

Chemical characterization	Organo-Zinnverbindung + Kieselsäureester
Substance / product identification	
Hazardous ingredients	Bis (neodecanoyloxy) dioctylstannan, CAS no.: 68299-15-0; EINECS no.: 269-595-4; Xn, R 48/22, 53 ; < 5,0 % Tetraethylsilikat, CAS no.: 78-10-4; EINECS no.: 201-083-8; Xn, R 10, 20, 36/37 ; < 70,0 %

	CAS no.	EINECS no.	%	Hazard symbols	R phrases
Bis(neodecanoyloxy) dioctylstannan	68299-15-0	269-595-4	< 5	Xn	22, 48, 53
Tetraethylsilikat	78-10-4	201-083-8	< 70	Xn	10, 20, 36/37
Additional information	-				

04. First aid measures

General Information	Remove contaminated clothing immediately and dispose of safely., By continuous complaints consult a physician., Never give anything by mouth to an unconscious person.
First aid measures / inhalation.	When vapours are intensively inhaled, seek medical help immediately., Remove the casualty into fresh air and keep him calm., In case of respiratory arrest induce breathing with a respiratory device. Seek medical advice.
First aid measures / skin contact.	Affected skin should first be dabbed with cotton wool, then washed with plenty of water and a mild cleanser., Consult a doctor if skin irritation persists.
First aid measures / eye contact.	In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water., In case of irritation consult an oculist.
First aid measures / ingestion.	Rinse out mouth and give plenty of water to drink., Do not induce vomiting., Take medical treatment.
Advice to doctor	-

05. Fire-fighting measures

Suitable extinguishing media	foam, dry powder, water mist, sand, carbon dioxide., water spray jet
Extinguishing media that must not be used for safety	Full water jet

reasons	
Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases.	-
Special protective equipment for firefighting	Use self-contained breathing apparatus.
Additional informations (chapter 5)	Cool endangered containers with water spray jet.

06. Accidental release measures

personal precautions.	Keep away sources of ignition., Avoid contact with skin, eyes and clothing., Use breathing apparatus if exposed to vapours/dust/aerosol., Refer to protective measures listed in sections 7 and 8.
environmental precautions.	Do not allow to enter drains or waterways., Prevent spread over a wide area (e.g. by containment or oil barriers)., In case the product spills into sewage waters, immediately inform the authorities.
methods for cleaning up/taking up.	Pick up mechanically., Pick up with absorbent material (eg sand, kieselgur, acid binder, universal binder, sawdust)., Dispose of as prescribed.
Additional informations (chapter 6).	-

07. Handling and storage

Handling	
Hints on safe handling.	Observe the usual precautions for handling chemicals., Open and handle container with care., Provide good ventilation of working area (local exhaust ventilation if necessary).
Hints for protection against fire and explosion.	Keep away from sources of ignition - refrain from smoking., Take precautionary measures against electrostatic loading.

Storage	
Requirements for storage rooms and vessels.	Store product in closed containers., Store always in containers, which comply with the original packing.
. Hints on storage assembly.	-
Further information on storage conditions.	Protect from frost., Keep container tightly closed, cool and dry., Protect from atmospheric moisture and water.
Storage category	-
Storage stability	-
Recommended storage temperature	Max. + 25 °C

08. Exposure controls/personal protection

Additional hints on technical system design.	-
Ingredients with occupational exposure limits to be monitored	CAS no.: 78-10-4 Tetraethylsilikat, MAK 170,0 mg/m ³ ; Zinn-Verbindungen (organische), MAK 0,1 mg/m ³ CAS no.: 64-17-5 Ethanol, AGW 960,0 mg/m ³ ; Aerosol – einatembare Fraktion, AGW 10,0 mg/m ³

Personal protective equipment <input type="checkbox"/> Personal protective equipment <input type="checkbox"/> Persönliche Schutzausrüstung	
Respiratory protection	Breathing apparatus in the event of high concentrations., Full mask, filter A
Hand protection	Butyl rubber gloves
Eye protection	safety glasses
Skin protection	light protective clothing
General protective and hygiene measures	Avoid contact with eyes and skin., Do not inhale gases/vapours/aerosols., Do not eat, drink or smoke during work time., Wash hands before breaks and after work.

09. Physical and chemical properties

Appearance.	
Form	Liquid
Colour	colourless
Odour	slightly perceptible

Safety data	
-------------	--

Changes in physical state

Boiling point, Boiling range	> 100	°C	1013 hPa
------------------------------	-------	----	----------

Flash point

	34	°C	
--	----	----	--

Ignition temperature

	215	°C	
--	-----	----	--

self ignition

explosion limits	1,3	Vol. %	
------------------	-----	--------	--

Upper explosion limit	23	Vol. %	
-----------------------	----	--------	--

Vapour pressure

	12,5	hPa	20 °C
--	------	-----	-------

Density

	1,02	g/cm ³	
--	------	-------------------	--

Solubility in water

	virtually insoluble	g/l	
--	---------------------	-----	--

Soluble in

	n.a.	g/l	
--	------	-----	--

pH-Value

	n.a.		
--	------	--	--

Viscosity

	1,6	mm ² /s	
--	-----	--------------------	--

Other information (chapter 9.)	-
---------------------------------	---

10. Stability and reactivity

Hazardous reactions	Reacts strongly with water., Reactions with acids, alkalis and oxidizing agents.
Hazardous decomposition products	Ethanol, No decomposition if used as prescribed.
Thermal decomposition	-
Additional informations (chapter 10)	-

11. Toxicologic indications

Acute toxicity	R phrases + S phrases
Acute oral toxicity	-
Acute dermal toxicity	-
Acute inhalational toxicity	-

Irritant/corrosive effects	
Irritant effect on skin	-
Irritant effect on eyes	-

Sensitization	-
Effects after repeated or prolonged exposition (subacute, subchronic, cronic)	-
Other information (chapter 11.)	-
Experiences made in practice.	-
General remarks.	-

12. Environmental indications

Data on elimination (persistence and degradability) :	
Physico-chemical eliminability	-
Biodegradability	Product in presence of water can be quickly hydrolysed., Ethanol readily degradable

Behaviour in environment compartments.	-
Ecotoxic effect	-
Fish toxicity	-
Daphnia toxicity	-
Algae toxicity	-
Bacteria toxicity	-
Further ecological information	Do not allow to enter soil, waterways or waste water canal.

Result of the evaluation of PBT characteristics	
---	--

13. Disposal considerations

Disposal considerations	
Disposal / product	
Disposal / contaminated packagings.	Not cleanable packings should be disposed of in agreement with the Regional Waste Disposal Authority.

Waste code no. / name of waste (for Germany only)	Assignment of a Waste Code Number in accordance with the European Waste Catalogue (EAK) should be carried out in agreement with the Regional Waste Disposal Authority.
---	--

14. Transport information

Land transport ADR/RID	
Class	3
Number/letter	-
Hazard number (Kemler-number)	30
UN number	1993
Technical name	Combustible liquid TETRAETHYLSILICAT, DIOCTYLZINNVERBINDUNG
Remarks	VG:III

Inland waterways transport ADN/ADNR	
Class	-
Number/letter	-
Category	-
Technical name	Combustible liquid TETRAETHYLSILICAT, DIOCTYLZINNVERBINDUNG
Remarks	VG:III

Marine transport IMDG/GGVSee	
Class	3
UN number	1993
page	-
EmS	-
MFAG	-
MARINE POLLUTANT	ja
Correct technical name	Combustible liquid TETRAETHYLSILICAT, DIOCTYLZINNVERBINDUNG
Remarks	VG:III

Air transport ICAO/IATA	
Class	3
UN number	31993
page	-
Correct technical name	Combustible liquid TETRAETHYLSILICAT, DIOCTYLZINNVERBINDUNG

Remarks	VG:III
---------	--------

Other information (chapter 14.)	-
---------------------------------	---

15. Regulatory information

Labelling in accordance with GefStoffV/EC	
The product is classified and labelled in accordance with EC Directives.	

Hazard symbols	Xn	Harmful
TA-Luft / components		TETRAETHYLSILICAT

R phrases	R 10	Flammable
	R 20	Harmful by inhalation.
	R 36/37	Irritating to eyes and respiratory system.

S phrases	S 2	Keep out of the reach of children.
	S 26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S 36/37	Wear suitable protective clothing and gloves.
	S 46	If swallowed, seek medical advice immediately and show this container or label.
	S 51	Use only in well-ventilated areas.

Other regulations	
Restriction of occupation.	§ 15a GefStoffV § 22 ArbSchG §§ 4,5 MuSchRiV
Decree for case of interference / remarks (for Germany only).	-
Classification according to VbF / remarks (for Germany only).	A II
TA-Luft (Ger.)	CAS no.: Bis (neodecanoyloxy) dioctylstannan, 5.2.5; CAS no.: Tetraethylsilikat, 5.2.5
Water Hazard Class (Ger.)	3
Other regulations, restrictions and prohibition regulations (for Germany only)	-
Securityevaluation++Stoffsicherheitsbeurteilung	

16. Other information (chapter 16.).

-

(n.a. = Not applicable; n.b.= not determined)

This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.