



SECTION 1: IDENTIFICATION OF SUBSTANCE/PREPARATION & COMPANY

REVISION DATE: 24 Jan 2012

Trade Name: MHS-Protect Accelerator
Product Description: Curing agent
Supplier: KCI Ltd (Kinetics Control and Innovation Limited)
Address: Unit 6 & 7, 1 Kirkhill Place, Dyce, Aberdeen, AB21 0GU, UK
Name of Contact: Roy MacKenzie
Emergency Tel No (UK): +44 (0) 1224 255480
Emergency Tel No (Europe): +44 (0) 7876 656870
Use of Substance/Preparation: Coating

SECTION 2: HAZARDS IDENTIFICATION

The Principle hazards of the product as supplied are: Harmful by inhalation, Irritating to eyes and skin, Vapours may form explosive mixtures with air.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Nature: Organotin compound

Hazardous Ingredients	CAS No	EC No.	Conc % (w/w)	REACH Reg.	Classification
Tetrapropyl orthosilicate	682-01-9	211-659-0	25.0	N/A	Xi R36/38
Trimethoxyphenylsilane	2996-92-1	221-066-9	11.0	N/A	Xn R22
Dimethylbis[(1-oxoneodecyl)oxy]stannane	68928-76-7	273-028-6	6.5	N/A	Xn R22 R52/R53 Xn R48/22
Methanol	67-56-1	200-659-6	0.36	N/A	F R11 T R39/23/24/25 R23/24/25
Cyclohexyltrimethoxysilane	-	Exempt or not available	0.24	N/A	N R51/53 Xn R22 Xi R38
Tetramethyl orthosilicate	681-84-5	211-656-4	<=0.14	T F T+	T R25 F R11 T+ R26

SECTION 4: FIRST AID MEASURES

Skin contact: Immediately flush with water. If eye irritation persists, consult a specialist
Eye contact: Immediately flush with water. If skin irritation persists, get medical attention
Ingestion: Obtain Medical attention.
Inhalation: Remove to fresh air. Obtain medical attention.

SECTION 5: FIRE FIGHTING MEASURES

Suitable extinguishing media: On large fires use dry chemical, foam or water spray(fog). On small fires use carbon dioxide(CO2), dry chemical or water spray. Water can be used to cool fire exposed containers.
Unsuitable extinguishing media: None known
Hazards during fire fighting: Vapours may form explosive mixtures with air
Special protective equipment/procedures: Self-contained breathing apparatus and Protective clothing should be worn. Keep containers cool with water spray until well after the fire is out.
Hazardous Combustion Products: Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Silica. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde.

SECTION 6: ACCIDENTAL RELEASE MEASURES/SPILLS & LEAKS

Personal protection: Use personal protective equipment.
Precautions to protect the environment: Prevent from spreading or entering drains, ditches or rivers.
Methods for clearing up Soak up with inert absorbent material. Shovel into suitable container for disposal. Very large spills should be contained using bunding etc.



SECTION 7: HANDLING AND STORAGE

Safe Handling: Avoid contact with skin and eyes. General ventilation is required. Local ventilation is required. Do not breathe vapour. Do not ingest.

Safe Storage: Do not store with oxidizing agents. Vapours may form explosive mixtures with air.

Unsuitable Packing Materials: None known

SECTION 8: EXPOSURE CONTROLS & PERSONAL PROTECTION

Exposure Control: Ventilation : Refer to section 7

Exposure Control for Hazardous Components	CAS Number	Exposure Limits
Trimethoxyphenylsilane	2996-92-1	250ppm STEL as methanol 200ppm TWA as methanol 333mg/m3 STEL as methanol 266 mg/m3 TWA as methanol
Dimethylbis[(1-oxoneodecyl)ox	68928-76-7	0.1mg/m3 TWA as Sn 0.2mg/m3 STEL as Sn
Methanol	67-56-1	200ppm TWA 250ppm STEL 266mg/m3 TWA 333mg/m3 TWA
Cyclohexyltrimethoxysilane	-	200ppm TWA, 50ppm STEL as methanol
Tetramethyl orthosilicate	681-84-5	5ppm STEL 1ppm TWA 32mg/m3 STEL 6.3mg/m3 TWA

Personal Protective Equipment

Respiratory protection: Suitable respiratory protection should be worn if the product is used in large quantities, confined spaces or in other circumstances where the OEL may be approached or exceeded. A suitable respirator must be worn if the product is used in any circumstances where an aerosol or mist may be generated, such as during spraying or similar activities. Depending on the working conditions, wear a respiratory mask with filter(s) or use a self-contained respirator. The choice of a filter type depends on the amount and type of chemical being handled in the workplace. Regarding filter characteristics, contact your respiratory protection supplier.

Hand protection: Chemical protective gloves should be worn

Eye protection: Face shield or safety goggles.

Hygiene measures: Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid	Colour	Colourless	Odour:	Very little	pH:	*
Boiling Point:	>35C/95F	Flash Point	64°C (Closed cup)	Flammability:	*	Explosive Properties	Vapours may form explosive mixtures with air.
Oxidising Properties:	No	Vapour Pressure:	*	Relative Density:	*	Solubility:	*
Water Solubility:	*	Log PoW	*	Viscosity:	40 mPa s at 25°C	Vapour Density	*
Evaporation Rate:	*	Other Information:	* indicates No data available				

SECTION 10: STABILITY & REACTIVITY

Stability: Stable under normal usage conditions.

Conditions to avoid: None Established

Materials to avoid: Can react with strong oxidising agents. This product releases methanol

Hazardous decomposition products: Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Silica. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde



SECTION 11 TOXICOLOGICAL INFORMATION

On contact with eyes:	Irritating
If inhaled:	Harmful by Inhalation of vapour. May cause dizziness, drowsiness, confusion, headaches, nausea and at high concentrations unconsciousness.
On contact with skin:	Irritating
On ingestion:	Small amounts transferred to the mouth by fingers during use should not injure. Swallowing large amounts may cause digestive discomfort. Forms methanol and may cause serious injury to man at doses >200mg/kg
Other health hazard information:	-

SECTION 12: ECOLOGICAL INFORMATION

Environmental fate and distribution:	This product hydrolyses in water of wet soil, releasing alcohols and silicic acid. This product hydrolyses in water or moist air, releasing methanol and organosilcons.
Ecotoxicity Effects:	This product contains substances which may cause adverse effects in the aquatic environment.
Fate and effects – wastewater treatment plants:	No adverse effects on bacteria are predicted.
Additional environmental information:	Bioaccumulation: Organotin compounds can bioaccumulate

SECTION 13: DISPOSAL CONSIDERATIONS

Product:	Dispose of in accordance with local regulations.
Packaging:	Dispose of in accordance with local regulations.

SECTION 14: TRANSPORT & LABELLING INFORMATION

Road/Rail (ADR/RID):	Not subject to ADR/RID
Sea Transport (IMDG):	Not subject to IMDG code
Air Transport (IATA):	Not subject to IATA regulations
Further information:	*

SECTION 15: REGULATORY INFORMATION

Labelling information to EEC Directive

Contains:	Tetramethyl orthosilicate
Symbols:	Xn Harmful
R Phrases:	R20 Harmful by Inhalation R36/38 Irritating to eyes and skin
S Phrases:	S2 Keep out of reach of children S23(v) Do not breathe vapour S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S37 Wear suitable gloves S46 If swallowed seek medical advice immediately and show container or label S51 Use only in well-ventilated areas

Status

AICS:	• All ingredients listed exempt or notified
IECSC:	• All ingredients listed or exempt
KECL:	• All ingredients listed exempt or notified
PICCS:	• All ingredients listed exempt or notified
DSL:	• All ingredients listed or exempt
EINECS:	• All ingredients listed exempt or notified (ELINCS)
TSCA:	• All chemical substances in this material are included on or exempt from listing on the TSCA inventory of chemical substances
ENCS/ISHL:	• All ingredients listed exempt or notified

SECTION 16: OTHER INFORMATION

The information provided in the Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.