SAFETY DATA SHEET

1. Identification

Product identifier: TEGO® Cure 100

Chemical name: Aminosilane containing polysiloxane

Other means of identification

Recommended use: Industrial use

Recommended restrictions: None known.

Manufacturer/Importer/Distributor Information

Company Name : Evonik Australia Pty Ltd
Suites 33&37
1 Ricketts Road
Mt Waverley, VIC 3149
Australia

Telephone : +61 3 8581 8400

Fax : +61 3 9544 5002

E-mail : productsafety-cs@evonik.com

Emergency telephone number:

24-Hour Health Emergency : +61 2 9037 2994

+1 703 527 3887 (CHEMTREC WORLD)

2. Hazard(s) identification

Classification according to GHS

Physical Hazards

Flammable liquids	Category 3

Health Hazards

Acute toxicity (Oral)	Category 5
Skin Corrosion/Irritation	Category 1B
Serious Eye Damage/Eye Irritation	Category 1
Skin sensitizer	Category 1

Label Elements

Hazard Symbol:

Signal Word: Danger

Hazard Statement:
Flammable liquid and vapor.
May be harmful if swallowed.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.

Precautionary Statements

Prevention:
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response:
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/ physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instructions on this label). IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage: Store in a well-ventilated place. Keep cool. Store locked up.

Disposal: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Other hazards: None known.

3. Composition/information on ingredients

Chemical name:
Aminosilane containing polysiloxane

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
3-Aminopropyltriethoxysilane	No data available.	919-30-2	30 - 60%
1,1,3,3-Tetramethylguanidine	No data available.	80-70-6	<5%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

General information: Remove soiled or soaked clothing immediately

Inhalation: fresh air supply, consult a doctor if feeling unwell.

Skin Contact: In case of contact with skin wash off immediately with soap and water Immediate medical treatment necessary, as untreated burns can result in slow-healing wounds

Eye contact: In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice

Ingestion: drink large quantities of water, do not induce vomiting; consult a physician - show this data sheet.

Personal Protection for First-aid Responders: No data available.

Most important symptoms and effects, both acute and delayed

Symptoms: Causes burns.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Foam, carbon dioxide or dry powder.

Unsuitable extinguishing media: Water.

Special hazards arising from the substance or mixture:	In the event of fire the following can be released: - Carbon monoxide, carbon dioxide, silicon dioxide benzene Under certain conditions of combustion traces of other toxic substances cannot be excluded

Special protective equipment and precautions for firefighters

Special fire fighting procedures:	Keep away from sources of ignition. Take action to prevent static discharges. Vapours may form explosive mixtures with air. Cool endangered containers by water spray
Special protective equipment for fire-fighters:	Do not inhale explosion and/or combustion gases. Self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment. Keep away sources of ignition. Ensure adequate ventilation.
Accidental release measures:	No data available.
Methods and material for containment and cleaning up:	Take up with absorbent material (eg sand, kieselguhr, universal binder) Dispose of absorbed material in accordance with the regulations.
Environmental Precautions:	Do not allow to enter drains or waterways Prevent product from getting into subsoil/soil.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):	No data available.
Safe handling advice:	Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes.Provide good ventilation of working area (local exhaust ventilation if necessary). Use respiratory protection during spraying.
Contact avoidance measures:	No data available.

Storage

Safe storage conditions:	Keep container tightly closed in a cool, well-ventilated place.Keep away from heat. Keep in a dry place.Protect from atmospheric moisture and water
Safe packaging materials:	No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Observe national threshold limit values.

Biological Limit Values

Observe national threshold limit values.

Appropriate Engineering Controls No data available.

Individual protection measures, such as personal protective equipment

General information: No data available.

Eye/face protection: goggles

Skin Protection

Hand Protection: Material: Butyl rubber.
Break-through time: 480 min
Glove thickness: 0.3 mm

Other: protective clothing

Respiratory Protection: in case of formation of vapours/aerosols: Short term: filter apparatus, combination filter A-P2

Hygiene measures: When using do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Remove soiled or soaked clothing immediately. Use skin protective preparation as preventive skin protection.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Colorless
Odor:	Characteristic
Odor Threshold:	not measured
Freezing point:	not measured
Boiling Point:	not measured
Flammability:	not measured

Upper/lower limit on flammability or explosive limits

Explosive limit - upper:	not measured
Explosive limit - lower:	not measured
Flash Point:	126 °F/52 °C (DIN EN ISO 2719)
Autoignition Temperature:	not measured
Decomposition Temperature:	not measured
pH:	not measured

Viscosity	
Dynamic viscosity:	10 - 100 mPa.s (77 °F/25 °C, DIN 53019)
Kinematic viscosity:	9 - 93 mm2/s (77 °F/25 °C, calculated)
Flow Time:	No data available.
Solubility(ies)	
Solubility in Water:	not measured
Solubility (other):	not measured
Partition coefficient (n-octanol/water):	not measured
Vapor pressure:	not measured
Relative density:	not measured
Density:	1.075 g/cm3 (77 °F/25 °C) (DIN 53217)
Bulk density:	No data available.
Relative vapor density:	not measured

Other information

Explosive properties:	not measured
Oxidizing properties:	not oxidizing
Minimum ignition temperature:	not measured
Metal Corrosion:	Not corrosive to metals
Evaporation Rate:	not measured

10. Stability and reactivity

Reactivity:	see section "Possibility of hazardous reactions".
Chemical Stability:	The product is stable under normal conditions.
Possibility of hazardous reactions:	No hazardous reactions with proper storage and handling
Conditions to avoid:	Open flames, sparks or input of much heat Moisture.
Incompatible Materials:	Water.
Hazardous Decomposition Products:	None with proper storage and handling.

11. Toxicological information

Information on toxicological effects

Information on likely routes of exposure

Inhalation:	Information on effects are given below.
Skin Contact:	Information on effects are given below.
Eye contact:	Information on effects are given below.
Ingestion:	Information on effects are given below.

Acute toxicity (list all possible routes of exposure)

Oral

Product:	LD 50 (ATEmix): 2,119 mg/kg
Components:	
3-Aminopropyltriethoxysilane	LD 50 (Rat): 1,490 mg/kg
1,1,3,3-Tetramethylguanidine	LD 50 (Rat): 835 mg/kg LD 50 (Rat): 794 mg/kg LD 50 (Rat): 895 mg/kg

Dermal

Product:	LD 50 (ATEmix): > 5,000 mg/kg
Components:	
3-Aminopropyltriethoxysilane	No classification
1,1,3,3-Tetramethylguanidine	No data due to skin-corrosive action

Inhalation

Product:	LC 50 (ATEmix, 4 h): > 40 mg/l Vapour
Components:	
3-Aminopropyltriethoxysilane	LC 50 (Rat, Female, 4 h): > 20 mg/l Vapour Not applicable, Dust and mist
1,1,3,3-Tetramethylguanidine	Vapour, No data due to skin-corrosive action Dust and mist, No data due to skin-corrosive action

Repeated dose toxicity

Product:	No data available.
Components:	
3-Aminopropyltriethoxysilane	NOAEL (Rat(Female, Male), Oral, 90 day, daily): 200 mg/kg
1,1,3,3-Tetramethylguanidine	No data available.

Skin Corrosion/Irritation

Product:	No data available.
Components:	
3-Aminopropyltriethoxysilane	OECD 404 (Rabbit): Corrosive. , < 1 h
1,1,3,3-Tetramethylguanidine	OECD 404 (Rabbit): Corrosive. , > 3.01 min - < 1 h

Serious Eye Damage/Eye Irritation

Product:	No data available.

Components:

3-Aminopropyltriethoxysilane	OECD 405 (Rabbit): Risk of serious damage to eyes.
1,1,3,3-Tetramethylguanidine	Risk of serious damage to eyes.

Respiratory or Skin Sensitization

Product: No data available.

Components:

3-Aminopropyltriethoxysilane	Buehler Test, OECD 406 (Guinea Pig): May cause sensitization by skin contact.
1,1,3,3-Tetramethylguanidine	No data available.

Carcinogenicity

Product: No data available.

Components:

3-Aminopropyltriethoxysilane	No evidence that cancer may be caused.
1,1,3,3-Tetramethylguanidine	No data available.

Germ Cell Mutagenicity

No data available.

In vitro

Product: No data available.

Components:

3-Aminopropyltriethoxysilane	Ames test (OECD 471): negative gene mutation test (OECD 476): negative Chromosomal aberration (OECD 473): negative
1,1,3,3-Tetramethylguanidine	No data available.

In vivo

Product: No data available.

Components:

3-Aminopropyltriethoxysilane	Micronucleus test (OECD 474) Intraperitoneal (Mouse, Female, Male): negative
1,1,3,3-Tetramethylguanidine	No data available.

Reproductive toxicity

Product: No data available.

Components:

3-Aminopropyltriethoxysilane	no evidence of reproductiontoxic properties
1,1,3,3-Tetramethylguanidine	No data available.

Specific Target Organ Toxicity - Single Exposure

Product:	No data available.
Components:	
3-Aminopropyltriethoxysilane	No data available.
1,1,3,3-Tetramethylguanidine	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product:	No data available.
Components:	
3-Aminopropyltriethoxysilane	No data available.
1,1,3,3-Tetramethylguanidine	No data available.

Aspiration Hazard

Product:	Not classified
Components:	
3-Aminopropyltriethoxysilane	Not classified
1,1,3,3-Tetramethylguanidine	Not classified

Information on health hazards

Other hazards

Product:	No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product:	No data available.
Components:	
3-Aminopropyltriethoxysilane	LC 0 (Brachydanio rerio (zebrafish), 96 h): > 934 mg/l
1,1,3,3-Tetramethylguanidine	No data available.

Aquatic Invertebrates

Product:	No data available.
Components:	
3-Aminopropyltriethoxysilane	EC 50 (Daphnia magna, 48 h): 331 mg/l

1,1,3,3-Tetramethylguanidine	EC 50 (Daphnia magna, 48 h): > 100 mg/l NOEC (Daphnia magna, 48 h): 100 mg/l

Toxicity to Aquatic Plants

Product:	No data available.
Components:	
3-Aminopropyltriethoxysilane	EC 50 (Desmodesmus subspicatus (green algae), 72 h): > 1,000 mg/l (OECD 201)
1,1,3,3-Tetramethylguanidine	EC 50 (Algae (Pseudokirchneriella subcapitata), 72 h): > 100 mg/l (OECD 201)

Toxicity to microorganisms

Product:	No data available.
Components:	
3-Aminopropyltriethoxysilane	EC 10 (Pseudomonas putida, 5.75 h): 13 mg/l (DIN EN ISO 10712)
1,1,3,3-Tetramethylguanidine	EC 50 (activated sludge, 3 h): 350 mg/l (OECD 209)

Toxicity to soil dwelling organisms

Product:	No data available.
Components:	
3-Aminopropyltriethoxysilane	No data available.
1,1,3,3-Tetramethylguanidine	No data available.

Toxicity to terrestrial organisms

Product:	No data available.
Components:	
3-Aminopropyltriethoxysilane	No data available.
1,1,3,3-Tetramethylguanidine	No data available.

Chronic hazards to the aquatic environment:

Fish

Product:	No data available.
Components:	
3-Aminopropyltriethoxysilane	No data available.
1,1,3,3-Tetramethylguanidine	No data available.

Aquatic Invertebrates

Product:	No data available.
Components:	
3-Aminopropyltriethoxysilane	No data available.

1,1,3,3-Tetramethylguanidine	No data available.

Toxicity to Aquatic Plants

Product:	No data available.
Components:	
3-Aminopropyltriethoxysilane	NOEC (Desmodesmus subspicatus (green algae), 72 h): 1.3 mg/l (OECD 201)
1,1,3,3-Tetramethylguanidine	NOEC (Algae (Pseudokirchneriella subcapitata), 72 h): 100 mg/l (OECD 201)

Toxicity to microorganisms

Product:	No data available.
Components:	
3-Aminopropyltriethoxysilane	EC 10 (Pseudomonas putida, 5.75 h): 13 mg/l (DIN EN ISO 10712)
1,1,3,3-Tetramethylguanidine	EC 50 (activated sludge, 3 h): 350 mg/l (OECD 209)

Toxicity to soil dwelling organisms

Product:	No data available.
Components:	
3-Aminopropyltriethoxysilane	No data available.
1,1,3,3-Tetramethylguanidine	No data available.

Toxicity to terrestrial organisms

Product:	No data available.
Components:	
3-Aminopropyltriethoxysilane	No data available.
1,1,3,3-Tetramethylguanidine	No data available.

Persistence and Degradability

Biodegradation

Product:	No data available.
Components:	
3-Aminopropyltriethoxysilane	67 % (28 d, (DOC; Die Away test - 79/831/EEC part C.4-A)) The product is not readily biodegradable.
1,1,3,3-Tetramethylguanidine	5 % (28 d, OECD 301 D) The product is not biodegradable., aerobic

BOD/COD Ratio

Product:	No data available.
Components:	

3-Aminopropyltriethoxysilane	No data available.
1,1,3,3-Tetramethylguanidine	No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product:	No data available.
Components:	
3-Aminopropyltriethoxysilane	not bioaccumulative
1,1,3,3-Tetramethylguanidine	No data available.

Partition Coefficient n-octanol / water (log Kow)

Product:	Log Kow: not measured
Components:	
3-Aminopropyltriethoxysilane	Log Kow: 1.7 20 °C (QSAR)
1,1,3,3-Tetramethylguanidine	No data available.

Mobility in soil:

Product	No data available.
Components:	
3-Aminopropyltriethoxysilane	Adsorption on the floor: low.
1,1,3,3-Tetramethylguanidine	No data available.

Product	No data available.
Components:	
3-Aminopropyltriethoxysilane	No data available.
1,1,3,3-Tetramethylguanidine	No data available.

Other adverse effects:

Other hazards

Product:	Do not allow to enter soil, waterways or waste water canal.

13. Disposal considerations

Disposal methods:	In accordance with local authority regulations, take to special waste incineration plant
Contaminated Packaging:	If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards.

14. Transport information

ADG

UN number or ID number	:	UN 2734
Proper shipping name	:	AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. (3-Aminopropyl triethoxy silane, 1,1,3,3-Tetramethylguanidine)
Class	:	8
Subsidiary risk	:	3
Packing group	:	II
Labels	:	8 (3)
Hazchem Code	:	•2W

International Regulations

IATA-DGR

UN/ID No.	:	UN 2734
Proper shipping name	:	Amines, liquid, corrosive, flammable, n.o.s. (3-Aminopropyl triethoxy silane, 1,1,3,3-Tetramethylguanidine)
Class	:	8
Subsidiary risk	:	3
Packing group	:	II
Labels	:	8 (3)
Packing instruction (cargo aircraft)	:	855
Packing instruction (passenger aircraft)	:	851

IMDG-Code

UN number or ID number	:	UN 2734
Proper shipping name	:	AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. (3-Aminopropyl triethoxy silane, 1,1,3,3-Tetramethylguanidine)
Class	:	8
Subsidiary risk	:	3
Packing group	:	II
Labels	:	8 (3)
EmS Code	:	F-E, S-C
Marine pollutant	:	no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. Regulatory information

International regulations

Montreal protocol
Not applicable

Stockholm convention
Not applicable

Rotterdam convention
Not applicable

Kyoto protocol
Not applicable

Inventory Status:

EINECS, ELINCS or NLP:	Not in compliance with the inventory.	

16.Other information, including date of preparation or last revision

Issue Date: 19.08.2021

Version #: 1.1

Further Information: No data available.

Revision Information: Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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