SAFETY DATA SHEET

Sika Crystal Clear MS



Section 1. Identification

Product name : Sika Crystal Clear MS

Product type : Paste.

Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

Supplier/Manufacturer Sika (NZ) Ltd.

PO Box 19 192 Avondale Auckland 1746

85-91 Patiki Road

Avondale Auckland 1026

www.sika.co.nz +64 9 820 2900 +64 9 828 4091

Emergency telephone number (with hours of

operation)

Fax no.

Telephone no.:

e-mail address of person responsible for this SDS

: 0800 734 607

Section 2. Hazards identification

HSNO Classification : 3.1 - FLAMMABLE LIQUIDS - Category D

6.3 - SKIN IRRITATION - Category B

6.8 - REPRODUCTIVE AND DEVELOPMENTAL TOXICITY [Fertility] - Category B

6.8 - REPRODUCTIVE AND DEVELOPMENTAL TOXICITY [Unborn child] -

Category B

This material is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 and has been classified according to the Hazardous Substances (Classifications) Regulations 2001.

This material is not classified as a dangerous good according to criteria in New Zealand Standard 5433:2007 Transport of Dangerous Goods on Land.

GHS label elements

Signal word : Warning

Hazard statements : Combustible liquid.

Causes mild skin irritation.

Suspected of damaging fertility or the unborn child.

Precautionary statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions

have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from flames and

hot surfaces.

Response : IF exposed or concerned: Get medical advice/attention.

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

Disposal : Dispose of contents and container in accordance with all local, regional, national

and international regulations.

Sika Crystal Clear MS Page: 2/10

Section 2. Hazards identification

Symbol



Other hazards which do not result in classification

: Product hydrolyses under formation of methanol (CAS no. 67-56-1). Methanol is toxic by inhalation, in contact with skin and if swallowed. Methanol causes damage to organs. Methanol is highly flammable. Risk of eye irritation. Risk of skin irritation.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

CAS number/other identifiers

CAS number : Not applicable.

EC number : Mixture.

Product code : 611234-3

Ingredient name	%	CAS number
3-(trimethoxysilyl)propylamine trimethoxyvinylsilane	>= 1 - < 5 >= 1 - < 3	13822-56-5 2768-02-7
methanol	<3	67-56-1
xylene	<1	1330-20-7

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

Description of necessary first aid measures

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Ingestion

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.

Sika Crystal Clear MS Page: 3/10

Section 4. First-aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

Inhalation: Exposure to decomposition products may cause a health hazard. Serious effects

may be delayed following exposure.

Ingestion : Irritating to mouth, throat and stomach.

Skin contact : Causes mild skin irritation.

Eye contact : Causes eye irritation.

Over-exposure signs/symptoms

Inhalation : Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

Ingestion: Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

Skin: Adverse symptoms may include the following:

irritation redness

reduced foetal weight increase in foetal deaths skeletal malformations

Eyes : Adverse symptoms may include the following:

pain or irritation watering redness

Indication of immediate medical attention and special treatment needed, if necessary

Specific treatments: Not available.

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. It

may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable : Use dry chemical, CO2, water spray (fog) or foam.

Not suitable : Do not use water jet.

Specific hazards arising from the chemical

: Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may

create fire or explosion hazard.

Hazardous thermal decomposition products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides

Hazchem code

: Not available.

Special precautions for fire-

fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk.

Use water spray to keep fire-exposed containers cool.

Sika Crystal Clear MS Page: 4/10

Section 5. Fire-fighting measures

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental

Sika Crystal Clear MS Page: 5/10

Section 7. Handling and storage

contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits		
methanol	NZ OSH (New Zealand, 12/2011). Absorbed through skin.		
	WES-STEL: 328 mg/m³ 15 minute(s). WES-STEL: 250 ppm 15 minute(s). WES-TWA: 262 mg/m³ 8 hour(s). WES-TWA: 200 ppm 8 hour(s).		
xylene	NZ OSH (New Zealand, 12/2011). WES-TWA: 217 mg/m³ 8 hour(s). WES-TWA: 50 ppm 8 hour(s).		

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection

: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eye protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 9. Physical and chemical properties

Appearance

Physical state : Paste.

Colour : Clear.

Odour : Characteristic.
Odour threshold : Not available.

pH : 7

Sika Crystal Clear MS Page: 6/10

Section 9. Physical and chemical properties

Melting point : Not available. **Boiling point** Not available.

Closed cup: 61 to 93.3°C (141.8 to 199.9°F) Flash point

Burning rate : Not applicable. **Burning time** Not applicable. **Evaporation rate** Not available. Flammability (solid, gas) : Not available. Lower and upper explosive : Not applicable.

(flammable) limits

Vapour pressure : Not applicable. Vapour density : Not available.

Density ~1 g/cm³ [20°C (68°F)]

Relative density : Not available.

Solubility : Insoluble in the following materials: water

Solubility in water : Not available. : Not available. Partition coefficient: n-

octanol/water

: Not applicable. Auto-ignition temperature **Decomposition temperature** : Not available. **Viscosity** : Not available.

Section 10. Stability and reactivity

Chemical stability The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials

: Reactive or incompatible with the following materials: oxidizing materials

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on the likely routes of exposure

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects

may be delayed following exposure.

Ingestion Irritating to mouth, throat and stomach.

Skin contact : Causes mild skin irritation. Eye contact : Causes eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Adverse symptoms may include the following:

> reduced foetal weight increase in foetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

> reduced foetal weight increase in foetal deaths skeletal malformations

Version Date of issue/Date of revision: 27.05.2014 Sika Crystal Clear MS Page: 7/10

Section 11. Toxicological information

Skin contact: Adverse symptoms may include the following:

irritation redness

reduced foetal weight increase in foetal deaths skeletal malformations

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Delayed and immediate effects and also chronic effects from short and long term exposure

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
trimethoxyvinylsilane	LC50 Inhalation Vapour	Rat	16.8 mg/l	4 hours
	LD50 Dermal	Rat	3540 mg/kg	-
	LD50 Oral	Rat	7120 mg/kg	-
methanol	LD50 Dermal	Rat	300 mg/kg	-
	LD50 Oral	Rat	100 mg/kg	-
xylene	LD50 Dermal	Rat	1100 mg/kg	-

Irritation/Corrosion

Not available.

Sensitisation

Not available.

Potential chronic health effects

General : No known significant effects or critical hazards.Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Eye contact : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : Suspected of damaging the unborn child.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : Suspected of damaging fertility.

Chronic toxicity

Not available.

Carcinogenicity

Not available.

Mutagenicity

Not available.

Teratogenicity

Not available.

Reproductive toxicity

Not available.

Specific target organ toxicity

Sika Crystal Clear MS Page: 8/10

Section 11. Toxicological information

Name		Route of exposure	Target organs
methanol xylene	Category B		Not determined Not determined Not determined

Aspiration hazard

Not available.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Inhalation (vapours)	550 mg/l

Section 12. Ecological information

Ecotoxicity

: No known significant effects or critical hazards.

Aquatic and terrestrial toxicity

Not available.

Persistence/degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
methanol	-0.77	-	low
xylene	3.16	-	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any byproducts should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

Sika Crystal Clear MS Page: 9/10

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
New Zealand Class	Not regulated.		-	-		-
ADG Class	Not regulated.		-	-		-
ADR/RID Class	Not regulated.		-	-		-
IATA Class	Not regulated.		-	-		-
IMDG Class	Not regulated.		-	-		-

PG*: Packing group

Section 15. Regulatory information

New Zealand Inventory of Chemicals (NZIoC)

: All components are listed or exempted.

HSNO Approval Number

: HSR002657

HSNO Group Standard HSNO Classification

: Surface Coatings and Colourants (Combustible) Group Standard 2006

: 3.1 - FLAMMABLE LIQUIDS - Category D

6.3 - SKIN IRRITATION - Category B

6.8 - REPRODUCTIVE AND DEVELOPMENTAL TOXICITY [Fertility] - Category B

6.8 - REPRODUCTIVE AND DEVELOPMENTAL TOXICITY [Unborn child] -

Category B

Australia inventory (AICS)

: Not determined.

Safety, health and environmental regulations specific for the product : No known specific national and/or regional regulations applicable to this product (including its ingredients).

Section 16. Other information

History

Date of printing : 27.05.2014.

Date of issue/Date of : 27.05.2014.

revision

: No previous validation.

Version

• 1

Key to abbreviations

Date of previous issue

: ADN = European Provisions concerning the International Carriage of Dangerous

Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of

Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) RID = The Regulations concerning the International Carriage of Dangerous Goods

Sika Crystal Clear MS Page: 10/10

Section 16. Other information

by Rail

UN = United Nations

References : Not available.

▼ Indicates information that has changed from previously issued version.

Notice to reader

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.