

TOSSEAL83 AMB/White

SAFETY DATA SHEET

1 Product and company identification

Name of chemical (Product name) : TOSSEAL83 AMB/White

Manufacturer/Importer/Distributor Information : Momentive Performance Materials Japan LLC
Akasaka Park Building
5-2-20 Akasaka, Minato-ku
Tokyo Japan

Contact person : commercial.services@momentive.com

Telephone : +81-3-5544-3100
Telefax : +81-3-5544-3101

Emergency telephone number : +81-3-5544-3111
+81-276-31-4118 (night / weekend)

Responsible Department : Product Stewardship & Compliance Group

2 Hazard(s) identification

GHS classification:

Health Hazards:

Skin sensitizer Category 1

Environmental Hazards:

Acute hazards to the aquatic environment Category 1

Chronic hazards to the aquatic environment Category 3

GHS label elements:

Pictograms:



Signal Word: Warning

Hazard Statement: May cause an allergic skin reaction.
Very toxic to aquatic life.
Harmful to aquatic life with long lasting effects.

Precautionary Statements:

Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray. Wash face, hands and

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any exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment.

Response: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instructions on this label). Take off contaminated clothing and wash it before reuse. Collect spillage.

Storage: Not applicable

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

Other hazards which do not result in GHS classification: None.

3 Composition/information on ingredients

Chemical nature: Silicone sealant

Mixtures

Chemical Identity	CAS number	Concentration*
methyl tris-(methyl ethyl ketoximo) silane	22984-54-9	1.0 - 10%
TITANIUM DIOXIDE	13463-67-7	1.0 - 10%
butanone oxime vinylsilane	2224-33-1	0.1 - 1.0%
Aminoethyl aminopropyl trimethoxy silane	1760-24-3	0.1 - 1.0%
Zinc oxide	1314-13-2	0.1 - 1.0%
Zinc 2-pyridinethiol-1-oxide	13463-41-7	<0.1%

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

4 First-aid measures

Inhalation: If inhaled, move victim to fresh air and seek medical attention.

Skin Contact: Wash the skin immediately with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact: Flush thoroughly with water for at least 15 minutes. Get medical assistance.

Ingestion: Do not induce vomiting. Get medical attention immediately.

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Most important symptoms/effects, acute and delayed

Symptoms: None known.

Hazards: No data available.

5 Fire-fighting measures

Extinguishing media: Extinguish with foam, carbon dioxide or dry powder.

Unsuitable extinguishing media: Avoid water in straight hose stream; will scatter and spread fire.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep unprotected persons away. Remove sources of ignition. Use personal protective equipment. Keep upwind.

Environmental Precautions: Do not allow runoff to sewer, waterway or ground.

Methods or materials for containment and cleaning up: Put in an empty container for recovery after preventing spill by sand or sandbags, if the amount of spill is large. Put in an empty container for recovery after wiping or soaking up in an inert material, if the amount of spill is small.

Prevention of secondary hazards: Remove sources of ignition.

7 Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): Provide adequate general and local exhaust ventilation. Eyewash bottle with clean water.

Safe handling advice: "Wear eye, hand and respiratory protection when in handling." Keep away from sources of ignition - No smoking. Protect from moisture. Seal opened containers and use up as soon as possible. This product release Methyl Ethyl Ketoxime during curing. Use only in well-ventilated areas. Avoid inhalation of vapors and spray mists.

Contact avoidance measures: Wear suitable gloves and eye/face protection.

Hygiene measures: Avoid contact with eyes, skin, and clothing. Wash hands after handling. When using do not eat, drink or smoke.

Storage

Safe storage conditions: Store in a dark, cool place indoors, with container tightly closed.

Safe packaging materials: No data available.

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8 Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits:

Chemical name	Type	Exposure Limit Values	Regulation Sources
TITANIUM DIOXIDE - Dust.	TLV	0.025 mg/m3	Japan. OELs - ISHL. (Workplace Environment Assessment Standards), as amended (04 2020)
TITANIUM DIOXIDE - as Ti	TWA	0.3 mg/m3	Japan. OELs - JSOH (Recommendation of Occupational Exposure Limits), as amended (05 2021)
TITANIUM DIOXIDE - Respirable dust.	TWA	1 mg/m3	Japan. OELs - JSOH (Recommendation of Occupational Exposure Limits), as amended (05 2021)
TITANIUM DIOXIDE - Total dust.	TWA	4 mg/m3	Japan. OELs - JSOH (Recommendation of Occupational Exposure Limits), as amended (05 2021)
Zinc oxide - Dust.	TLV	0.025 mg/m3	Japan. OELs - ISHL. (Workplace Environment Assessment Standards), as amended (04 2020)
Zinc oxide - Total dust.	TWA	4 mg/m3	Japan. OELs - JSOH (Recommendation of Occupational Exposure Limits), as amended (05 2021)
Zinc oxide - Respirable dust.	TWA	1 mg/m3	Japan. OELs - JSOH (Recommendation of Occupational Exposure Limits), as amended (05 2021)
Zinc oxide	TWA	0.5 mg/m3	Japan. OELs - JSOH (Recommendation of Occupational Exposure Limits), as amended (05 2021)

Personal protective equipment (ppe)

Respiratory Protection:	Gas mask for organic gas if MEKO exposure limits are exceeded (3 ppm 8-hr TWA, recommended workplace exposure guideline.
Hand Protection:	Chemical resistant gloves
Eye Protection:	Safety glasses with side shields
Skin and Body Protection:	Chemical resistant clothing Safety shoes

9 Physical and chemical properties

Physical state:	solid
Form:	Paste
Color:	White
Odor:	Negligible

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Odor threshold	No data available.
Melting point/freezing point	No data available.
Initial boiling point and boiling range	No data available.
Flammability	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Flash Point	81 °C
Evaporation rate	No data available.
Auto-ignition temperature	450 °C
Decomposition temperature	No data available.
SADT	No data available.
pH	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	No data available.
Solubility(ies)	
Solubility in water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water)Log Pow	No data available.
Vapor pressure	No data available.
Density	1.04 g/cm ³ (23 °C)
Relative density	No data available.
Vapor density	No data available.

10 Stability and reactivity

Reactivity:	No dangerous reaction if used as recommended.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Hazardous polymerization does not occur.
Conditions to avoid:	Keep away from heat, sparks and open flame.
Incompatible Materials:	Moisture. The catalysis of strong acids or bases cause polymerization or decomposition.
Hazardous Decomposition Products:	Reacts with water/moisture liberating Methylethylketoxime (MEKO) = 2-Butanone-oxime. Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

11 Toxicological information

Acute toxicity (list all possible routes of exposure)

Oral	
Product:	Not classified for acute toxicity based on available data.
MSDS_JP	

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Components:

methyl tris-(methyl ethyl ketoximo) silane	No data available.
TITANIUM DIOXIDE	LD 50 (Rat): > 10,000 mg/kg
butanone oxime vinylsilane	No data available.
Aminoethyl aminopropyl trimethoxy silane	LD 50 (Rat): 2,995 mg/kg
Zinc oxide	LD 50 (Rat): > 5,000 mg/kg
Zinc 2-pyridinethiol-1-oxide	No data available.

Dermal

Product: Not classified for acute toxicity based on available data.

Components:

methyl tris-(methyl ethyl ketoximo) silane	No data available.
TITANIUM DIOXIDE	LD 50 (Rabbit): > 10,000 mg/kg
butanone oxime vinylsilane	No data available.
Aminoethyl aminopropyl trimethoxy silane	LD 50 (Rabbit): > 2,000 mg/kg
Zinc oxide	No data available.
Zinc 2-pyridinethiol-1-oxide	No data available.

Inhalation

Product: Not classified for acute toxicity based on available data.

Repeated dose toxicity

Product: No data available.

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Components:

Aminoethyl aminopropyl trimethoxy silane NOAEL (Rat, Oral, 28 d): ≥ 500 mg/kg

Skin Corrosion/Irritation

Product:

No data available.

Components:

methyl tris-(methyl ethyl ketoximo) silane Corrosive

TITANIUM DIOXIDE No data available.

butanone oxime vinylsilane Corrosive

Aminoethyl aminopropyl trimethoxy silane OECD Test Guideline 404 (Rabbit): No skin irritation

Zinc oxide (Rabbit): No skin irritation

Zinc 2-pyridinethiol-1-oxide No data available.

Serious Eye Damage/Eye Irritation

Product:

No data available.

Components:

methyl tris-(methyl ethyl ketoximo) silane Irritating to eyes. Category 2

TITANIUM DIOXIDE No eye irritation

butanone oxime vinylsilane Risk of serious damage to eyes. Category 1

Aminoethyl aminopropyl trimethoxy silane OECD Test Guideline 405 (Rabbit): Strongly irritating.

Zinc oxide (Rabbit): slightly irritating (not classified according to the German Dangerous Substances legislation)
No data available.

Zinc 2-pyridinethiol-1-oxide No data available.

Respiratory sensitization

Product:

No data available.

Components:

methyl tris-(methyl ethyl ketoximo) silane No data available.

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TITANIUM DIOXIDE No data available.

butanone oxime
vinylsilane No data available.

Aminoethyl
aminopropyl trimethoxy
silane No data available.

Zinc oxide No data available.

Zinc 2-pyridinethiol-1-
oxide No data available.

Skin sensitization

Product: No data available.

Components:

methyl tris-(methyl ethyl
ketoximo) silane Category 1B

TITANIUM DIOXIDE No data available.

butanone oxime
vinylsilane Category 1B

Aminoethyl
aminopropyl trimethoxy
silane No data available.

Zinc oxide No data available.

Zinc 2-pyridinethiol-1-
oxide No data available.

Carcinogenicity

Product: No data available.

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Components:

methyl tris-(methyl ethyl
ketoximo) silane No data available.

TITANIUM DIOXIDE No data available.

butanone oxime
vinylsilane No data available.

Aminoethyl aminopropyl
trimethoxy silane No data available.

Zinc oxide No data available.

Zinc 2-pyridinethiol-1-
oxide No data available.

Japan Society for Occupational Health: Carcinogen:

No carcinogenic components identified

Japan. ISHL Designated Carcinogen:

No carcinogenic components identified

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

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Germ Cell Mutagenicity

In vitro

Product: No data available.

Components:

methyl tris-(methyl ethyl ketoximo) silane No data available.

TITANIUM DIOXIDE No data available.

butanone oxime vinylsilane No data available.

Aminoethyl aminopropyl trimethoxy silane No data available.

Zinc oxide No data available.

Zinc 2-pyridinethiol-1-oxide No data available.

In vivo

Product: No data available.

Components:

methyl tris-(methyl ethyl ketoximo) silane No data available.

TITANIUM DIOXIDE No data available.

butanone oxime vinylsilane No data available.

Aminoethyl aminopropyl trimethoxy silane No data available.

Zinc oxide No data available.

Zinc 2-pyridinethiol-1-oxide No data available.

Reproductive toxicity

Product: No data available.

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Components:

methyl tris-(methyl ethyl
ketoximo) silane No data available.

TITANIUM DIOXIDE No data available.

butanone oxime
vinylsilane No data available.

Aminoethyl aminopropyl
trimethoxy silane No data available.

Zinc oxide No data available.

Zinc 2-pyridinethiol-1-
oxide No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Components:

methyl tris-(methyl ethyl
ketoximo) silane No data available.

TITANIUM DIOXIDE No data available.

butanone oxime
vinylsilane No data available.

Aminoethyl aminopropyl
trimethoxy silane No data available.

Zinc oxide No data available.

Zinc 2-pyridinethiol-1-
oxide No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

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Components:

methyl tris-(methyl ethyl ketoximo) silane Category 2: Cardiovascular system

TITANIUM DIOXIDE No data available.

butanone oxime vinylsilane Category 2: blood system

Aminoethyl aminopropyl trimethoxy silane No data available.

Zinc oxide No data available.

Zinc 2-pyridinethiol-1-oxide No data available.

Aspiration Hazard

Product: No data available.

Components:

methyl tris-(methyl ethyl ketoximo) silane No data available.

TITANIUM DIOXIDE No data available.

butanone oxime vinylsilane No data available.

Aminoethyl aminopropyl trimethoxy silane No data available.

Zinc oxide No data available.

Zinc 2-pyridinethiol-1-oxide No data available.

Other effects: No data available.

12 Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment

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Fish

Product: No data available.

Components:

TITANIUM DIOXIDE LC0 (Leuciscus idus, 48 h): > 1,000 mg/l
Aminoethyl aminopropyl LC50 (Lepomis macrochirus): > 100 mg/l
trimethoxy silane

Aquatic Invertebrates

Product: No data available.

Components:

Aminoethyl aminopropyl EC50 (Daphnia magna, 48 h): 87.4 mg/l
trimethoxy silane

Toxicity to Aquatic Plants

Product: No data available.

Components:

methyl tris-(methyl ethyl ketoximo) silane No data available.
TITANIUM DIOXIDE No data available.
butanone oxime No data available.
vinylsilane
Aminoethyl aminopropyl No data available.
trimethoxy silane
Zinc oxide No data available.
Zinc 2-pyridinethiol-1-oxide No data available.

Toxicity to microorganisms

Product: No data available.

Components

methyl tris-(methyl ethyl ketoximo) silane No data available.
TITANIUM DIOXIDE EC0 (Pseudomonas putida, 24 h): > 10,000 mg/l
butanone oxime No data available.
vinylsilane
Aminoethyl aminopropyl No data available.
trimethoxy silane
Zinc oxide EC0 (Pseudomonas aeruginosa): 500 mg/l
Zinc 2-pyridinethiol-1-oxide No data available.

Chronic hazards to the aquatic environment

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Components:

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methyl tris-(methyl ethyl ketoximo) silane	No data available.
TITANIUM DIOXIDE	No data available.
butanone oxime	No data available.
vinylsilane	
Aminoethyl aminopropyl trimethoxy silane	No data available.
Zinc oxide	No data available.
Zinc 2-pyridinethiol-1-oxide	No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Components:

TITANIUM DIOXIDE 0 %

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Hazardous to the ozone layer: Not Regulated

Further Information: No data available.

13 Disposal considerations

General information:	The generation of waste should be avoided or minimized wherever possible. See Section 8 for information on appropriate personal protective equipment. Do not discharge into drains, water courses or onto the ground.
Disposal methods:	Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Contaminated Packaging:	Dispose of as unused product.

14 Transport information

International regulations

IATA

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UN number or ID number: UN 3077
UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
SOLID, N.O.S. (Zinc 2-pyridinethiol-1-oxide)
Transport Hazard Class(es): 9
Packing Group: III
Environmental Hazards:
Environmentally Hazardous: Yes
Marine Pollutant: Yes

IMDG Code

UN number or ID number: UN 3077
UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
SOLID, N.O.S. (Zinc 2-pyridinethiol-1-oxide)
Transport Hazard Class(es): 9
Packing Group: III
EmS No.: F-A; S-F
Environmental Hazards:
Environmentally Hazardous: Yes
Marine Pollutant: Yes

National Regulations

Domestic Standard: In compliance with domestic law.

Special precautions for user: In accordance with National and International regulations for Dangerous Goods and applicable Special Provisions, products otherwise classified as a Dangerous Goods for transport, with Class 9, UN 3077 or UN 3082, need not be packed, marked, labeled or placarded as a Dangerous Goods, when shipped in Single or combination packagings, containing a net quantity per single or inner packaging of 5 L or less, for liquids or having a net mass of 5 kg or less, for solids

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

Product is not transported in bulk.

15 Regulatory information

Japan CSCL:

Priority Assessment Chemical Substances:

Pyrithione zinc; (T-4)-bis[2-(thioxo-κ-pyridine-1(2H)-olato-κO)]zinc (II)
Butan-2-one oxime
Methyl (1H-1,3-benzimidazol-2-yl)carbamate(synonym: Carbendazim)

Monitoring Chemical Substances:

Not Regulated

Law concerning Pollutant Release and Transfer Register:

MSDS_JP

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Until March 31st, 2023

Specified Class 1 substance(s): Not regulated.

Class 1 Substance(s): Not regulated.

Class 2 Substance(s): Not regulated.

From April 1st, 2023

Specified Class 1 substance(s): Not regulated.

Class 1 Substance(s): Not regulated.

Class 2 Substance(s): Not regulated.

Industrial Safety and Health Act:

Article 57-2 Regulated Substance(s): Titanium dioxide; Zinc oxide;

Article 57 Regulated Substance(s) subject to labeling: Titanium dioxide

Organic Solvent Regulation Specified Substances Regulation: Not Regulated
Class 1 designated chemical substances: Not Regulated
Class 2 designated chemical substances: Not Regulated
Class 3 designated chemical substances: Not Regulated

Poisonous and Deleterious Substances Control Act:

Specified poisonous substance(s):

Main law: Not Regulated

Cabinet order: Not Regulated

Poisonous Substance(s):

Main law: Not Regulated

Cabinet order: Not Regulated

Deleterious Substance(s):

Main law: Not Regulated

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Cabinet order:

Not Regulated

Fire Service Law:

Designated Combustible material (Combustible Solid)
Keep away from fire

High Pressure Gas Safety Law:

Not Regulated

Act on Prevention of Marine Pollution and Maritime Disaster:

Not Regulated

Inventory Status:

Taiwan Chemical Substance Inventory:	On or in compliance with the inventory	Remarks: None.
Australia AICS:	On or in compliance with the inventory	Remarks: None.
Canada DSL Inventory List:	Not in compliance with the inventory.	Remarks: None.
Japan (ENCS) List:	On or in compliance with the inventory	Remarks: None.
China Inv. Existing Chemical Substances:	Q (quantity restricted)	Remarks: At least one component is not listed on the existing chemical inventory. However, the unlisted substance(s) is(are) registered by Momentive Performance Materials or exempted from registration. Please contact Momentive Performance Materials for further information on import/production details of this material.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory	Remarks: None.
Canada NDSL Inventory:	Not in compliance with the inventory.	Remarks: None.
Philippines PICCS:	Not in compliance with the inventory.	Remarks: None.
US TSCA Inventory:	Not in compliance with the inventory.	Remarks: None.
New Zealand Inventory of Chemicals:	On or in compliance with the inventory	Remarks: None.

16 Other Information

Revision Information: ARGLO_INVSTSARGHS_JP
Issue Date: 04/20/2023
SDS No.:

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Disclaimer:

Notice to reader

This material is developed and manufactured for industrial applications only. For medical or other special applications, use after performing safety testing on the product and confirming safety. Never use for human applications such as implant, impregnation, or where a residue may possibly remain in the body.

Further Information

The information provided in this 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 a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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.

Literature Reference: No data available.