

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance/mixture

Mixture

3.2 Hazardous components

Chemical name	CAS-No.	Concentration(Wt%)	Classification
Methyltriacetoxysilane	4253-34-3	1-10	Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Corr. 1B, H314.

***The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.**

4. FIRST AID MEASURES

4.1 Description of necessary first aid measures

- General advice : In the case of accident or if you feel unwell, seek medical advice immediately with this document, refer to following.
- If inhaled : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Get medical advice/attention if victim feel unwell.
- In case of skin contact : In case of contact, immediately flush skin with soap and plenty of water.
Remove contaminated clothing and shoes.
Get medical attention.
Wash clothing before reuse.
Thoroughly clean shoes before reuse.
- In case of eye contact : Immediately flush eyes with plenty of water for at least 15 minutes.
If easy to do, remove contact lens.
Get medical attention.
- If swallowed : DO NOT induce vomiting.
Get medical attention.
Rinse mouth thoroughly with water.

4.2 Most important symptoms and effects, both acute and delayed

- May cause an allergic skin reaction.
Causes serious eye irritation.
Causes damage to organs through prolonged or repeated exposure.
Ingestion is likely to be harmful or have adverse effects.

4.3 Protection of first-aiders

First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.

4.4 Notes to physician

Treat symptomatically and supportively.

5. FIREFIGHTING MEASURES

- Fire Hazard : Not flammable.
- Flash point : Above 90°C (Close cup)
- Suitable extinguishing media : Water spray, Alcohol-resistant foam, Carbon dioxide (CO₂), Dry chemical powder.
- Unsuitable extinguishing media : Water spray, Alcohol-resistant foam, Carbon dioxide (CO₂), Dry chemical powder.
- Specific hazards during fire-fighting : Exposure to combustion products may be a hazard to health.
- Hazardous combustion products : Irritating organic vapors may be formed.
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.
- Protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Keep unprotected persons away.
Follow safe handling advice and personal protective equipment recommendations.
Avoid contact with skin, eyes and inhalation of vapors.
Remove all sources of ignition.
Use personal protection recommended in Section 8.

6.2 Environmental precautions

Discharge into the environment must be avoided.
Prevent further leakage or spillage if safe to do so.
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material.
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.
Clean up remaining materials from spill with suitable absorbent.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

6.4 Reference to other sections

See Section 7 for more information.
See section 8 for more information.
See section 13 for more information.
See section 15 for more information.

7. HANDLING AND STORAGE

7.1 Local/Total ventilation

Use only with adequate ventilation.

7.2 Precautions for safe handling

Use only as directed on the label.
Do not swallow and get in eyes.
Handle in accordance with good hygiene and safety practice.
Keep away from water, fire, heat and oxide.
Protect from moisture.
Take care to prevent spills, waste and minimize release to the environment.
Persons susceptible to allergic reactions should not handle this product.
See Engineering measures under Section 8.

7.3 Conditions for safe storage

Keep in properly labelled containers.
Store locked up.
Store in accordance with the particular national regulations.

7.4 Materials to avoid

Strong oxidizing agents, Organic peroxides, Acids, Foodstuffs, Explosives, Hot, Heat.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment



- Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended, In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- Hand protection : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.
- Eye protection : Wear the following personal protective equipment: Safety goggles
- Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).
- Hygienic measures : Ensure that eye flushing systems and safety showers are located close to the working place.
When using do not eat, drink or smoke.
Wash contaminated clothing before reuse.
Do not inhale gases / fumes / aerosols.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Paste
- Odor : Acetic
- pH : N/A
- Melting point/freezing point : N/A
- Boiling point/Boiling range : N/A
- Flash point : > 90 °C
- Density : 1.03g/ml
- Solubility in Water : Poorly
- Color : Red
- Relative vapour density : N/A
- Explosive properties : N/A
- Oxidizing properties : N/A
- Explosion area : N/A
- Flammability(solid, gas) : N/A

Remark: These values are not intended for use in preparing specifications.

10. STABILITY AND REACTIVITY

- 10.1 Reactivity** : Not classified as a reactivity hazard.
- 10.2 Chemical stability** : Stable under normal conditions.
- 10.3 Possibility of hazardous reactions** : No date available.
- 10.4 Conditions to avoid** : Exposure to moisture
- 10.5 Incompatible materials** : Material starts to cure in the presence of humid air or moisture.
- 10.6 Hazardous decomposition products** : No date available.

11. TOXICOLOGICAL INFORMATION

- 11.1 Information on likely routes of exposure** : Skin contact; Ingestion; Eye contact.

11.2 Potential Health Effects/Symptoms

- Inhalation : Cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain

- Skin contact : Bonds skin rapidly. Causes skin irritation, localized redness, swelling, itching, and dryness. May cause allergic skin reaction, redness, swelling, blistering, and itching.
- Eye contact : Bonds eyelids rapidly. Causes serious eye irritation, significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.
- Ingestion : Causes gastrointestinal irritation, abdominal pain, stomach upset, nausea, vomiting and diarrhea.

11.3 Acute toxicity

No further relevant information available.

12. ECOLOGICAL INFORMATION

No further relevant information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods

- Waste from residues : Dispose of in accordance with local regulations.
- Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not pierce or burn, even after use.
If not otherwise specified: Dispose of as unused product.

14. Transport Information

UNRTDG:

- UN No. :
- Class :
- Packaging group :
- Shipping Name :

Marine Transport IMDG-Code:

- UN No. :
- Class :
- Packaging group :
- Shipping Name :

Road Transport ADR:

- UN No. :
- Class :
- Packaging group :
- Shipping Name :

Air Transport IATA-DGR:

- UN No. :
- Class :
- Packaging group :
- Shipping Name :

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture.

16. OTHER INFORMATION

16.1 Full text of H-Statements

- H319 : Causes serious eye irritation.
- H315 : Causes skin irritation.

16.2 National Fire Protection Association (U.S.A.)

Health : 2
Instability/Reactivity : 1

Flammability : 1
Special : N/A

16.3 Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ACGIH : American Conference of Governmental Industrial Hygienists; AIHA : American Industrial Hygiene Association; ASTM - American Society for the Testing of Materials; ATE:acute toxicity estimate; bw - Body weight; CEIL: Ceiling; CMRG : Chemical Manufacturer's Recommended Guidelines; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OSHA : United States Department of Labor - Occupational Safety and Health Administration; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; STEL: Short Term Exposure Limit; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); TWA: Time-Weighted-Average; UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative.

16.4 Further information

Sources of key data used to : Internal technical data, data from raw material SDSs, OECD eChem Portal search compile the Safety Data results and European Chemicals Agency, <http://echa.europa.eu/> Sheet

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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