

Material Safety Data Sheet
(1907/2006/EC)

WD Silicone Co., Ltd.

No.021 (WD-21)

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1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product Name Vinyltrimethoxysilane
Product No. 21
Brand WD
CAS No. 2768-02-7

1.2 Relevant identified uses of the substance or mixture and uses advised against
Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company WD Silicone Co., Ltd.
 Maple Garden, Wuhan University
 Wuhan, Hubei, China
Telephone +86-27-87215023
Fax +86-27-87214371
Email Address Sale@wdsilicone.cn

1.4 Emergency telephone number

Emergency telephone No. +8618971680837

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Flammable liquids (Category 2)

Skin irritation (Category 2)

Eye irritation (Category 2)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Flammable. Irritating to eyes, respiratory system and skin.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram



Signal word

Danger

Hazard statement(s)

H225

Highly flammable liquid and vapour.

H315

Causes skin irritation.

H319

Causes serious eye irritation.

Precautionary

statement(s)

P210

Wear protective gloves.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard

none

Statements

According to European Directive 67/548/EEC as amended.

Hazard Symbol(s)



R-phrases(s)

R10

Flammable.

R36/37/38

Irritating to eyes, respiratory system and skin.

S-phrases(s)

S26

In case of contact with eyes, rinse immediately with plenty of water and seek

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- S36/37/39
2.3 **Other hazards** medical advice.
Wear suitable protective clothing, gloves and eye/face protection.
This compound is capable of forming ethanol if hydrolyzed. Ethanol vapor may cause dizziness or suffocation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms (Trimethoxysilyl)ethylene
Formula $C_5H_{12}O_3Si$
Molecular Weight 148.23 g/mol

Component	CAS No.	EC No.	Index No.	Concentration
(3-Aminopropyl)triethoxysilane	2768-02-7	220-449-8	-	-

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

4.3 Indication of immediate medical attention and special treatment needed

no data available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NO_x), silicon oxides.

5.3 Precautions for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

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7.1 Precautions for safe handling

Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a cool, dry and well-ventilated place. Containers which are opened must be carefully resealed. Store under inert gas. Moisture sensitive.

7.3 Specific end uses

no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance : Colorless transparent liquid

Odour : no data available

Odour Threshold : no data available

pH : no data available

Melting/freezing point : no data available

Initial boiling point and boiling range : 123 °C @ 101.3 kPa

Flash point : 22 °C (closed cup)

Evaporation rate : no data available

Flammability (solid, gas) : no data available

Upper explosion limit : no data available

Lower explosion limit : no data available

Vapour pressure : no data available

Vapour density : no data available

Relative density : 0.97 g/ml @ 25 °C

Water solubility : Slightly soluble

Autoignition temperature : 230 °C

Decomposition temperature : no data available

Viscosity : no data available

Explosive properties : no data available

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Oxidizing properties : no data available

9.2 Other safety information
no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

Highly hydrolysable.

10.2 Chemical stability

Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Heat, flames, sparks and moisture. Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Strong oxidizing agents, strong acids, bases, peroxides.

10.6 Hazardous decomposition products

Carbon monoxide, carbon dioxide, silicon dioxide. It gives off methanol when contact with moisture.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - rat - 7340 µl/kg

LD50 Dermal - rabbit - 3360 µl/kg

Skin corrosion/irritation

Skin - rabbit - Mild skin irritation - 24 h

Serious eye damage/eye irritation

Eyes - rabbit - Mild eye irritation - 24 h

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation

May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion

May be harmful if swallowed.

Skin

May be harmful if absorbed through skin. Causes skin irritation.

Eyes

May Causes eye irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: VV6770000.

Caution has to be taken when the component undergoes hydrolysis as it will give off methanol.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

LC50 Inhalation – rat - 2773 ppm

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- 12.2 **Persistence and degradability**
no data available
- 12.3 **Bioaccumulative potential**
no data available
- 12.4 **Mobility in soil**
no data available
- 12.5 **Results of PBT and vPvB assessment**
no data available
- 12.6 **Other adverse effects**
no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

	ADR/RID	IMDG	IATA		
14.1 UN No.	1993	1993	1993		
14.2 UN proper shipping name	FLAMMABLE (Trimethoxyvinylsilane)	LIQUID, (Trimethoxyvinylsilane)	N.O.S.	Flammable liquid, (Trimethoxyvinylsilane)	n.o.s.
14.3 Transport hazard class	3	3	3		
14.4 Packaging group	II	II	II		
14.5 Environmental hazards	no	(Marine pollutant) no	no		
14.6 Further Information	no data available.				

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

no data available

15.2 Chemical Safety Assessment

no data available

15.3 Other International Regulations

Listed on or in accordance with the following inventories:

- IECSC - China
- PICCS - Philippines
- ECL - Korea
- AICS - Australia
- DSL - Canada
- TSCA - USA
- ENCS - Japan

16. OTHER INFORMATION

The above information does not purport to be all inclusive and shall be used only as a guide.