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

1.1 Product identifiers

Product Name	[3-(Methacryloyloxy)propyl]trimethoxysilane
Product No.	70
Brand	WD
CAS No.	2530-85-0

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]

Eye irritation (Category 2)
Specific target organ toxicity - single exposure (Category 3)
Skin irritation (Category 2)

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

Irritating to eyes, respiratory system and skin.

2.2 Label elements

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

Pictogram

Signal word Warning

Hazard statement(s)

H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.

Precautionary statement(s)

P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
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 Statements	none

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

Hazard symbol(s)

R-phrase(s)

R36/37/38	Irritating to eyes, respiratory system and skin.

S-phrase(s)

S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 After contact with skin, wash immediately with plenty of soap and water.

2.3 Other hazards This material is capable of forming methanol if hydrolyzed. Methanol vapour may cause dizziness, drowsiness, disturbances of vision, and tingling, numbness, and shooting pains in the hands and forearms.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms 3-(Trimethoxysilyl)propyl methacrylate
Formula $C_{10}H_{20}O_5Si$
Molecular Weight 236.34 g/mol

Component	CAS No.	EC No.	Index No.	Concentration
[3-(Methacryloyloxy)propyl]trimethoxysilane	2530-83-8	219-784-2	607-134-00-4	-

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
Rinse thoroughly with plenty of water for at least 15 minutes 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
no data available

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, 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
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 according to local regulations. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid contact with skin and eyes. 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. Moisture and heat 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 safety goggles with side-shields 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

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	: -48 °C @ 101.3 kPa
Boiling point	: 190 °C @ 101.3 kPa (lit.)
Flash point	: 92 °C (closed cup)
Evaporation rate	: no data available
Flammability (solid, gas)	: no data available
Upper explosion limit	: 5.4 % (V)
Lower explosion limit	: 0.9 % (V)
Vapour pressure	: 1.3 kPa @ 130 °C
Vapour density	: 8.6 (Air = 1.0)
Relative density	: 1.04 g/ml @ 25 °C
Water solubility	: no data available
Autoignition temperature	: no data available
Decomposition temperature	: no data available
Viscosity	: 3 cSt @ 25 °C
Explosive properties	: no data available
Oxidizing properties	: no data available

9.2 Other safety information

no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity
May undergo polymerization under heat or UV condition.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
no data available

10.4 Conditions to avoid
Heat, flames, sparks, UV and humidity.

10.5 Incompatible materials
Oxidizing agents, acids, bases and moisture.

10.6 Hazardous decomposition products
Carbon monoxide, carbon dioxide, silicon dioxide. It gives off methanol when contact with water.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - rat – 22,600 mg/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
May cause respiratory irritation.

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	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: UC0230000.
Caution has to be taken when the component undergoes hydrolysis as it will release methanol.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	LC50 - Cyprinus carpio (Carp) - > 1042 mg/l - 96 h
Toxicity to daphnia	EC50 - Daphnia magna (Crustacea) - > 876 mg/l - 48 h

12.2 Persistence and degradability
Biodegradability

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.**	-	-	-
14.2	**UN proper shipping name**	Not dangerous goods		
14.3	**Transport hazard class**	-	-	-
14.4	**Packaging group**	-	-	-
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.