

SECTION 1: Identification of the substance/mixture and of the company

Product Identifier

Product Name: Triisopropylsilyl acrylate

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

Relevant applications identified For industrial use

Details of the supplier of the safety data sheet

Company

Watson International Limited
No.18 Zhaofeng Road Kunshan City Jiangsu Province
China 215332
Email: contact@watson-int.com

Emergency Telephone Number: +86 512 81867280

SECTION 2: Hazardous identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2 H315

Skin Sens. 1B H317

Aquatic Chronic 2 H411

Label elements

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



Pictogram

Signal word

Warning

Hazard statement(s)

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

H411

Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P261

Avoid breathing dust/fume/gas/mist/vapors/spray.

P264

Wash hands thoroughly after handling.

P272

Contaminated work clothing should not be allowed out of the workplace.

P273

Avoid release to the environment.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P302 + P352

IF ON SKIN: Wash with plenty of water.

P333 + P313

If skin irritation or rash occurs: Get medical advice/ attention.

P362 + P364

Take off contaminated clothing and wash it before reuse.

P391

Collect spillage.

P501

Dispose of contents/container in accordance with local regulation.

Other hazards

Not available

SECTION 3: Composition/information on ingredients

Substances

Ingredient(s):

Chemical Name	CAS No.	EC No.	Concentration
Triisopropylsilyl acrylate	157859-20-6	—	99.00%
Other impurities in total	N/A	N/A	1.00%

SECTION 4: First aid measures

Description of first aid measures

General advice

In all cases of doubt, or when symptoms persist, seek medical attention.

If inhaled

Move exposed person to fresh air. Symptomatic treatment. In case of indisposition seek medical advice.

In case of skin contact

Wash the contaminated skin with running water and detergent.

In case of eye contact

Immediately flush eyes with plenty of water. Seek medical attention.

If swallowed

Symptomatic treatment. In case of indisposition seek medical advice.

Most important symptoms and effects, both acute and delayed

May cause an allergic skin reaction. Causes skin irritation.

Indication of any immediate medical attention and special treatment needed

If skin irritation or rash occurs, get medical advice/attention.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media

Water, dry powder, foam and carbon dioxide may be used.

Unsuitable extinguishing media

Not available.

Special hazards arising from the substance or mixture

Product arising from burning: Silicon dioxide, carbon monoxide and carbon dioxide.

Advice for firefighters

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

For non-emergency personnel:

Use personal protective equipment. Avoid vapor formation. Ensure adequate ventilation. Evacuate personnel to safe areas. Refer to section 8 of SDS for personal protection details.

For emergency responders:

Wear an appropriate NIOSH/MSHA approved respirator if vapor is generated.

Environmental precautions:

Do not allow material to be released to the environment without proper governmental permits.

Methods and materials for containment and cleaning up

Wear suitable protective clothing. Sweep up, for liquids absorb using a suitable absorbent material (eg. kieselguhr, sand, saw dust etc). Transfer to labelled containers and dispose of by incineration in accordance with local regulations.

Wash spill site with water. Prevent release to water courses.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

SECTION 7: Handling and storage
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Precautions for safe handling

Protective measures:

Avoid contact with skin and eyes. Avoid formation of vapor. Provide appropriate exhaust ventilation at places where vapor is formed. Normal measures for preventive fire protection.

Advice on general occupational hygiene:

Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities

The substance should be stored in sealed containers in well ventilated rooms at room temperature secured from falling down.

Specific end uses

Not applicable.

SECTION 8: Exposure Controls/Personal Protection

Control parameters

DNEL/DMEL and PNEC-Values:

Workers - Hazard via inhalation route-Systemic effects-Long term exposure-DNEL (Derived No Effect Level): 1.2 mg/m³

Workers - Hazard via dermal route-Systemic effects-DNEL (Derived No Effect Level): 0.2 mg/kg bw/day

General Population - Hazard via oral route-Systemic effects-DNEL (Derived No Effect Level): 0.076 mg/kg bw/day

Hazard for aquatic organisms- PNEC aqua (freshwater): 0 mg/L

Hazard for aquatic organisms- PNEC aqua (marine water): 0 mg/L

Hazard for aquatic organisms- PNEC aqua (intermittent releases): 0.002 mg/L

Hazard for aquatic organisms- PNEC STP: 76 mg/L

Hazard for aquatic organisms- PNEC sediment (freshwater): 0.003 mg/kg sediment dw

Hazard for aquatic organisms- PNEC sediment (marine water): 0 mg/kg sediment dw

Hazard for terrestrial organisms-PNEC soil: 0 mg/kg soil dw

Hazard for predators-PNEC oral: 1.3 mg/kg food

Exposure controls

Appropriate engineering controls

Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures, such as personal protective equipment:

Eye/face protection:

Close-fitting protective goggles (e.g. closed goggles).

Hand protection:

Glove material for example, butyl-rubber

Material thickness 0.5 mm

Break through time \geq 480 min

Glove material for example, Fluorinated rubber (Viton)

Material thickness 0.4 mm

Break through time \geq 480 min

Body protection:

Suitable protective clothing - Use disposable clothing if appropriate.

Respiratory protection:

In case of vapors/aerosols being formed or if the limit values like TLV are exceeded: use respiratory equipment with suitable filter (filter type ABEK) or wear a self-contained respiratory apparatus. Use only respiratory protection equipment with CE-symbol including four digit test number. The filter class for the

respirator must be suitable for the maximum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

Note time limit for wearing respiratory protective equipment.

Thermal hazards:

Wear suitable protective clothing to prevent heat.

Environmental exposure controls:

Avoid discharge into the environment.

According to local regulations, Federal and official regulations.

SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties

a) Appearance	Colorless clear liquid
b) Odor	no data available
c) Odor Threshold	no data available
d) pH	no data available
e) Melting point/ range	< -20°C
f) Boiling point/range	238.5°C (97.1kPa)
g) Flash point	93.9 - 94.9 °C @ 20 kPa
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapor pressure	3.9 - 5.1 hPa @ 20 - 25 °C
l) Vapor density	no data available
m) Relative density	0.913(20 °C)
n) Water solubility	200 µg/L @ 20 °C and pH 7.23 - 7.25
o) Partition coefficient: n-octanol/water	no data available
p) Auto-ignition temperature	250 °C
q) Decomposition temperature	180 °C
r) Viscosity	no data available
s) Explosive properties	no data available
t) Oxidizing properties	no data available
u) Molecular Formula	C ₁₃ H ₂₆ O ₂ Si
v) Molecular Weight	242.43

Other safety information

no data available

SECTION 10: Stability And Reactivity

Reactivity

The substance is stable under normal storage and handling conditions.

Chemical stability

Stable at room temperature in closed containers under normal storage and handling conditions.

Possibility of hazardous reactions

No dangerous reactions known.

Conditions to avoid

Incompatible materials. Formation of flammable or explosive vapor/air mixtures possible.

Incompatible materials

Not available.

Hazardous decomposition products

Silicon dioxide, carbon monoxide and carbon dioxide.

SECTION 11: Toxicological Information

Information on toxicological effects

Acute toxicity:

LD50(Oral, Rat): > 2 500 mg/kg bw

LD50(Dermal, Rat): > 2 000 mg/kg bw

LC50(Inhalation, Rat): Not available

Skin corrosion/Irritation: Causes skin irritation.

Serious eye damage/irritation: Not classified

Respiratory or skin sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT- single exposure: Not classified

STOT-repeated exposure: Not classified

Aspiration hazard: Not classified

SECTION 12: Ecological Effects

Toxicity

Toxicity to microorganisms: NOEC (3 h) 100 mg/L

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

Results of PBT and vPvB assessment

no data available

Other adverse effects

no data available

SECTION 13: Disposal considerations

Waste treatment methods

The material should be disposed of by incineration in a chemical incinerator in compliance with national and regional requirements.

SECTION 14: Transport Information

UN number

ADR/RID: 3082

IMDG: 3082

IATA: 3082

UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Passenger Aircraft: Not permitted for transport

Transport hazard class(es)

ADR/RID: 9

IMDG: 9

IATA: 9

Packing group

ADR/RID: III

IMDG: III

IATA: III

Environmental hazards

ADR/RID: no

IMDG Marine Pollutant: no

IATA: no

Special precautions for user

no data available

SECTION 15: Regulatory Information

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

Relevant information regarding authorization:

Not applicable.

Relevant information regarding restriction:

Not applicable.

Other EU regulations:

Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

Other National regulations:

Not applicable

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other Information

Further information

It must be recognized that the physical and chemical properties of any product may not be fully understood and that new, possibly hazardous products may arise from reactions between chemicals. The information given in this data sheet is based on our present knowledge and shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.