

Polyether modified siloxane fluid TPD-377

Version No:1.0

Safety Data Sheet (Conforms to Annex II of REACH (1907/2006) - Regulation 2020/878)

SDS202305239216

Issue Date:25/05/2023

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

1.1. Product Identifier

Product name: Polyether modified siloxane fluid TPD-377

Other means of identification: Silicone Agricultural Adjuvant, Silicone Wetting Agent

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

Relevant identified uses:

Agriculture additives, Coating additives, Cleaning additives

Uses advised against: No specific uses advised against are identified.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Supplier name	Fuzhou Topda New Material Co.,Ltd.
Address	17-16,C3# Building,Cangshan Wanda Plaza,216 Pushang Avenue,Fuzhou, 350007,China.
Telephone	+86-591-86396155
Email	contact@fluorochemie.com
Emergency Telephone	+86-15859107755

SECTION 2 Hazards identification

2.1. Classification of the substance or mixture

Classification according to regulation (EC) No 1272/2008 [CLP] and amendments	H302 - Acute Toxicity (Oral) Category 4
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2.2. Label elements

Hazard pictogram(s)



Signal word: **Warning**

Hazard statement(s)

H302: Harmful if swallowed.

Supplementary Phrases

Not Applicable

Precautionary statement(s) General

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children.

P103: Read carefully and follow all instructions.

Precautionary statement(s) Prevention

P264: Wash all exposed external body areas thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

Precautionary statement(s) Response

P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor/physician/first aider if you feel unwell.

P330: Rinse mouth.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

P501: Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

2.3. Other hazards

REACH - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

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SECTION 3 Composition / information on ingredients

3.1.Substances

See 'Composition on ingredients' in Section 3.2

3.2.Mixtures

1. CAS No 2. EC No 3. Index No 4. REACH No	%[weight]	Name	Classification according to regulation (EC) No 1272/2008 [CLP] and amendments	SCL / M-Factor	Nanoform Particle Characteristics
1. 27306-78-1 2. Not Available 3. Not Available 4. Not Available	>80	heptamethyltrisiloxane, ethoxylated, propyl ether	Acute Toxicity (Oral) Category 4; H302	Not Available	Not Available
1. 27252-80-8 2. Not Available 3. Not Available 4. Not Available	<20	allyl methyl ether ethoxylated	Acute Toxicity (Oral) Category 4; H302	Not Available	Not Available

SECTION 4 First aid measures

4.1. Description of first aid measures

Eye Contact

If this product comes in contact with the eyes:

- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact

If skin or hair contact occurs:

- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

Inhalation

- If fumes, aerosols or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

Ingestion

- **IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.**
- For advice, contact a Poisons Information Centre or a doctor.
- Urgent hospital treatment is likely to be needed.
- In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition.
- If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a copy of the SDS should be provided. Further action will be the responsibility of the medical specialist.
- If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the SDS.

Where medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise:

- **INDUCE** vomiting with fingers down the back of the throat, **ONLY IF CONSCIOUS**. Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

NOTE: Wear a protective glove when inducing vomiting by mechanical means.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

4.3. Indication of any immediate medical attention and special treatment needed

As in all cases of suspected poisoning, follow the ABCDEs of emergency medicine (airway, breathing, circulation, disability, exposure), then the ABCDEs of toxicology (antidotes, basics, change absorption, change distribution, change elimination).

For poisons (where specific treatment regime is absent):

BASIC TREATMENT

- Establish a patent airway with suction where necessary.
- Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- Administer oxygen by non-rebreather mask at 10 to 15 L/min.
- Monitor and treat, where necessary, for pulmonary oedema.
- Monitor and treat, where necessary, for shock.
- Anticipate seizures.
- **DO NOT** use emetics. Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.

ADVANCED TREATMENT

- Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.
- Positive-pressure ventilation using a bag-valve mask might be of use.
- Monitor and treat, where necessary, for arrhythmias.
- Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- Drug therapy should be considered for pulmonary oedema.
- Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.

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- Treat seizures with diazepam.
 - Proparacaine hydrochloride should be used to assist eye irrigation.
- BRONSTEIN, A.C. and CURRANCE, P.L.
EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

SECTION 5 Firefighting measures

5.1. Extinguishing media

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

5.2. Special hazards arising from the substrate or mixture**Fire Incompatibility**

None known.

5.3. Advice for firefighters**Fire Fighting**

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves in the event of a fire.
- Prevent, by any means available, spillage from entering drains or water courses.

Fire/Explosion Hazard

- Non combustible.
 - Not considered a significant fire risk, however containers may burn.
- May emit poisonous fumes.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See section 8

6.2. Environmental precautions

See section 12

6.3. Methods and material for containment and cleaning up**Minor Spills**

- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.

Major Spills

- Moderate hazard.
- Clear area of personnel and move upwind.
 - Alert Fire Brigade and tell them location and nature of hazard.

6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

7.1. Precautions for safe handling**Safe handling**

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.

Fire and explosion protection

See section 5

Other information**7.2. Conditions for safe storage, including any incompatibilities****Suitable container**

- Polyethylene or polypropylene container.
- Packing as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

Storage incompatibility

Traces of benzene, a carcinogen, may form when silicones are heated in air above 230 degrees C. Concentrated acids and bases cause degradation of polymer. Boiling water may soften and weaken material.

None known

Hazard categories in accordance with Regulation (EC) No 1272/2008

Not Available

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Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of

Not Available

7.3. Specific end use(s)

See section 1.2

SECTION 8 Exposure controls / personal protection**8.1. Control parameters**

Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
Not Available	Not Available	Not Available

* Values for General Population

Occupational Exposure Limits (OEL)**INGREDIENT DATA**

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Not Applicable

8.2. Exposure controls**8.2.1. Appropriate engineering controls**

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

8.2.2. Individual protection measures, such as personal protective equipment**Eye and face protection**

- Safety glasses with side shields
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.

Skin protection

See Hand protection below

Hands/feet protection

- Wear chemical protective gloves, e.g. PVC.
- Wear safety footwear or safety gumboots, e.g. Rubber

Body protection

See Other protection below

Other protection

- Overalls.
- P.V.C apron.
- Barrier cream.

8.2.3. Environmental exposure controls

See section 12

SECTION 9 Physical and chemical properties**9.1. Information on basic physical and chemical properties****Appearance** : Light yellow to amber transparent liquid

Physical state	Liquid	Relative density (Water = 1)	Not Available
Odour	Slight	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	5.0-7.0	Decomposition temperature (°C)	Not Available

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Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	30-50
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	<20.5mN/m
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Not Available	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available
Nanoform Solubility	Not Available	Nanoform Particle Characteristics	Not Available
Cloud point (°C)	<10		

9.2. Other information

Not Available

SECTION 10 Stability and reactivity

10.1.Reactivity:

See section 7.2

10.2. Chemical stability:

- Unstable in the presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.
- Silicone fluids are stable under normal storage conditions.
- Hazardous polymerisation will not occur.
- At temperatures > 150 C, silicones can slowly react with the oxygen in air.

10.3. Possibility of hazardous reactions:

See section 7.2

10.4. Conditions to avoid:

See section 7.2

10.5. Incompatible materials:

See section 7.2

10.6. Hazardous decomposition products:

See section 5.3

SECTION 11 Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Polyether modified siloxane fluid TPD-377	No data available for product
heptamethyltrisiloxane, ethoxylated, propyl ether	TOXICITY Inhalation(Rat) LC50: 2000 mg/m3/4h Intraperitoneal (Rat) LD50: 250 ul/kg Oral (Rat) LD50: 4920 ul/kg
allyl methyl ether ethoxylated	TOXICITY Oral (Rat) LD50: >500 mg/kg
Skin Irritation/Corrosion	Not Classified
Serious Eye Damage/Irritation	Not Classified
Respiratory or Skin sensitisation	Not Classified
Mutagenicity	Not Classified
Carcinogenicity	Not Classified
Reproductivity	Not Classified
STOT - Single Exposure	Not Classified

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STOT - Repeated Exposure	Not Classified
Aspiration Hazard	Not Classified

11.2.1. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

11.2.2. Other information

See Section 11.1

SECTION 12 Ecological information**12.1. Toxicity**

Polyether modified siloxane fluid TPD-377	No data available for product
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For Siloxanes:

Environmental Fate: Siloxanes are used in cosmetics, wax, polishes, and to a minor extent in several other applications.

Atmospheric Fate: In the presence of nitrate ions, short chain siloxanes are broken down by sunlight to the level of silicate within days. The main source atmospheric siloxane release to the air is via evaporation.

DO NOT discharge into sewer or waterways.

12.2. Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
heptamethyltrisiloxane, ethoxylated, propyl ether	HIGH	HIGH

12.3. Bioaccumulative potential

Ingredient	Bioaccumulation
heptamethyltrisiloxane, ethoxylated, propyl ether	HIGH (LogKOW = 5.2897)

12.4. Mobility in soil

Ingredient	Mobility
heptamethyltrisiloxane, ethoxylated, propyl ether	LOW (KOC = 736.1)

12.5. Results of PBT and vPvB assessment

	P	B	T
Relevant available data	Not Available	Not Available	Not Available
PBT	No	No	No
vPvB	No	No	No

PBT Criteria fulfilled?	No
vPvB	No

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

12.7. Other adverse effects

No evidence of ozone depleting properties were found in the current literature.

SECTION 13 Disposal considerations**13.1. Waste treatment methods****Product / Packaging disposal**

- Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.

Otherwise:

- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

- DO NOT** allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Recycle wherever possible.
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or incineration in a licensed apparatus (after admixture with suitable combustible material).

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Waste treatment options

Not Available

Sewage disposal options

Not Available

SECTION 14 Transport information

Labels Required**Marine Pollutant**

NO

Land transport (ADR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

- 14.1. UN number or ID number: **Not Applicable**
- 14.2. UN proper shipping name: **Not Applicable**
- 14.3. Transport hazard class(es):
 - Class: **Not Applicable**
 - Subsidiary risk: **Not Applicable**
- 14.4. Packing group: **Not Applicable**
- 14.5. Environmental hazard: **Not Applicable**
- 14.6. Special precautions for user:
 - Hazard identification (Kemler): **Not Applicable**
 - Classification code: **Not Applicable**
 - Hazard Label: **Not Applicable**
 - Special provisions: **Not Applicable**
 - Limited quantity: **Not Applicable**
 - Tunnel Restriction Code: **Not Applicable**

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

- 14.1. UN number: **Not Applicable**
- 14.2. UN proper shipping name: **Not Applicable**
- 14.3. Transport hazard class(es):
 - ICAO/IATA Class: **Not Applicable**
 - ICAO / IATA Subrisk: **Not Applicable**
 - ERG Code: **Not Applicable**
- 14.4. Packing group: **Not Applicable**
- 14.5. Environmental hazard: **Not Applicable**
- 14.6. Special precautions for user:
 - Special provisions: **Not Applicable**
 - Cargo Only Packing Instructions: **Not Applicable**
 - Cargo Only Maximum Qty / Pack: **Not Applicable**
 - Passenger and Cargo Packing Instructions: **Not Applicable**
 - Passenger and Cargo Maximum Qty / Pack: **Not Applicable**
 - Passenger and Cargo Limited Quantity Packing Instructions: **Not Applicable**
 - Passenger and Cargo Limited Maximum Qty / Pack: **Not Applicable**

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

- 14.1. UN number: **Not Applicable**
- 14.2. UN proper shipping name: **Not Applicable**
- 14.3. Transport hazard class(es):
 - IMDG Class: **Not Applicable**
 - IMDG Subrisk: **Not Applicable**
- 14.4. Packing group: **Not Applicable**
- 14.5. Environmental hazard: **Not Applicable**
- 14.6. Special precautions for user:
 - EMS Number: **Not Applicable**
 - Special provisions: **Not Applicable**
 - Limited Quantities: **Not Applicable**

Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

- 14.1. UN number: **Not Applicable**
- 14.2. UN proper shipping name: **Not Applicable**
- 14.3. Transport hazard class(es):
 - Not Applicable: **Not Applicable**
- 14.4. Packing group: **Not Applicable**
- 14.5. Environmental hazard: **Not Applicable**
- 14.6. Special precautions for user:

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Classification code: **Not Applicable**
 Special provisions: **Not Applicable**
 Limited quantity: **Not Applicable**
 Equipment required: **Not Applicable**
 Fire cones number: **Not Applicable**

SECTION 15 Regulatory information

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

heptamethyltrisiloxane, ethoxylated, propyl ether is found on the following regulatory lists

– Not Applicable

allyl methyl ether ethoxylated is found on the following regulatory lists

– Not Applicable

Information according to 2012/18/EU (Seveso III):

Seveso Category: Not Available

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

15.3. Classification of Substances and Mixtures into Water Hazard Classes

Preparation is WGK 1

Name	WGK	Score	Source
heptamethyltrisiloxane, ethoxylated, propyl ether	1	1	Calculated
allyl methyl ether ethoxylated	1	1	Calculated

SECTION 16 Other information

Full text Risk and Hazard codes

None

Other information

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios.

Definitions and abbreviations

PC – TWA: Permissible Concentration-Time Weighted Average
 PC – STEL: Permissible Concentration-Short Term Exposure Limit
 IARC: International Agency for Research on Cancer
 ACGIH: American Conference of Governmental Industrial Hygienists
 STEL: Short Term Exposure Limit
 TEEL: Temporary Emergency Exposure Limit
 IDLH: Immediately Dangerous to Life or Health Concentrations
 ES: Exposure Standard
 OSF: Odour Safety Factor
 NOAEL :No Observed Adverse Effect Level
 LOAEL: Lowest Observed Adverse Effect Level
 TLV: Threshold Limit Value
 LOD: Limit Of Detection
 OTV: Odour Threshold Value
 BCF: BioConcentration Factors
 BEI: Biological Exposure Index
 AIIC: Australian Inventory of Industrial Chemicals
 DSL: Domestic Substances List
 NDSL: Non-Domestic Substances List
 IECSC: Inventory of Existing Chemical Substance in China
 EINECS: European INventory of Existing Commercial chemical Substances
 ELINCS: European List of Notified Chemical Substances
 NLP: No-Longer Polymers