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

1.1 Product identifier

**Trade name:** THINNER for POLYFLON PTFE TC-7100 SERIES (TT7100)

**Article number:** TT7100

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

No further relevant information available.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

DAIKIN INDUSTRIES, LTD. CHEMICALS DIVISION:

Umeda Center Bldg., 4-12, Nakazaki-Nishi 2-chome, Kita-Ku, Osaka, JAPAN

Phone: (+81) 6-6373-4345 Fax: (+81) 6-6373-4281

Further information obtainable from: [http://www.daikin.com/](http://www.daikin.com/)

1.4 Emergency telephone number:


**SECTION 2: Hazard identification**

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

- **Flam. Liq. 3 H226** Flammable liquid and vapour.

- **Repr. 1B H360D** May damage the unborn child.

- **STOT RE 2 H373** May cause damage to organs through prolonged or repeated exposure.

- **Asp. Tox. 1 H304** May be fatal if swallowed and enters airways.

- **Skin Irrit. 2 H315** Causes skin irritation.

- **Eye Irrit. 2 H319** Causes serious eye irritation.

- **STOT SE 3 H335** May cause respiratory irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008:

The product is classified and labelled according to the CLP regulation.

Signal word: Danger

Precautionary statements:

- **P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

- **P301+P310** IF SWALLOWED: Immediately call a POISON CENTER/doctor.

- **P303+P361+P353** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

- **P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

- **P405** Store locked up.

- **P501** Dispose of contents/container in accordance with local/regional/national/international regulations.
SECTION 3: Composition/information on ingredients

Information on ingredients:

872-50-4 N-Methyl-2-pyrrolidone  60-70%
  T Repr. Cat. 2 R61; Xi R36/37/38
  Repr. 1B, H360D; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335

1330-20-7 Xylene  20-30%
  Xn R20/21; Xi R38
  R10
  Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315

108-88-3 Toluene  5-15%
  Xn R48/20-63-65; Xi R38; F R11
  R67
  Repr. Cat. 3
  Flam. Liq. 2, H225; Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304; Skin Irrit. 2, H315;
  STOT SE 3, H336

SVHC:

872-50-4 N-Methyl-2-pyrrolidone

Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Seek medical treatment.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:
  Remove contaminated clothes immediately.
  Immediately wash with water and soap and rinse thoroughly.
  Consult a doctor in case of complaints.

After eye contact:
  Immediately rinse with a lot of water for several minutes. Remove contact lenses if possible. Continue rinsing.
  Consult an ophthalmologist in case of complaints.

After swallowing:
  Rinse mouth with water. Do not induce vomiting.
  Consult a doctor in case of complaints.

4.2 Most important symptoms and effects, both acute and chronic: No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed:
  No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:
  Fire-extinguishing powder
  Foam
  CO2

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture:
  Formation of toxic gases is possible during heating or in case of fire.
  Receptacle may explode when heated.
  Extremely flammable; can ignite easily with heat, sparks, fire.

5.3 Advice for firefighters: Remove receptacles from area of fire if possible.

Protective equipment:
  Wear self-contained breathing apparatus and protective suit.
  Do not inhale explosion gases or combustion gases.
SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:
Ensure adequate ventilation before entering the area.
Stay on the windward side.
Keep out unauthorized persons.
Wear appropriate protective devices (See Section 8 Exposure Controls/ Personal Protection). Avoid contact with eyes and skin.
Do not swallow the product.
6.2 Environmental precautions: Prevent seepage into sewage system, workpits and cellars.
6.3 Methods and Material for containment and cleaning up:
For a small amount of leakage: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders) or collect in an empty container that can be sealed tightly.
For a small amount of leakage: Use clean anti-static tools when absorbing the product.
For a large amount of leakage: Enclose with banks to avoid outflow. Lead the leakage to a safe place and collect.
Remove ignition sources immediately.
Ground all equipment when the product leaks.
There is a danger of explosion. Prepare fire extinguisher in case of emergency.
6.4 Reference to other sections:
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:
Ensure good ventilation/exhaustion at the workplace.
Handle with care. Avoid jolting, friction and impact.
Do not handle until all safety precautions have been read and understood.
Information about fire - and explosion protection:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Use flame proof electric/ lighting devices and ventilation equipment.
Ground/Bond container and receiving equipment.
7.2 Conditions for safe storage, including any incompatibilities:
Storage
Requirements to be met by storerooms and receptacles:
Store in a cool and dry location.
Keep receptacle tightly sealed.
Information about storage in one common storage facility:
Store away from oxidising agents.
See section 10 for information on incompatible materials.
Further information about storage conditions:
Protect from heat and direct sunlight.
Store receptacle in a well ventilated area.
Store locked up.
7.3 Specific end use(s): No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.
8.1 Control parameters No further information available.
Ingredients with limit values that require monitoring at the workplace:

872-50-4 N-Methyl-2-pyrrolidone
IOELV (EU) Short-term value: 80 mg/m³, 20 ppm
Long-term value: 40 mg/m³, 10 ppm
Skin
Safety data sheet

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1330-20-7 Xylene
IOELV (EU) Short-term value: 442 mg/m³, 100 ppm
Long-term value: 221 mg/m³, 50 ppm
Skin

100-41-4 Ethylbenzene
IOELV (EU) Short-term value: 884 mg/m³, 200 ppm
Long-term value: 442 mg/m³, 100 ppm
Skin

8.2 Exposure controls
Personal protective equipment
General protective and hygienic measures:
Wash hands before breaks and at the end of work.
Do not eat or drink while working.
Keep away from tobacco products.
Respiratory protection:
Use respiratory protective device with filters for organic and acid gas (or airline respirators in some cases) if
formation of toxic gases is possible while the product is heated.
Use respiratory protective device with organic gas cartridge.
Protection of hands:

Protective gloves

Material of gloves: Rubber
Penetration time of glove material
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection:

Safety glasses

Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
General Information
Appearance
Form: Liquid
Colour: Transparent
Odour: Aromatic
Odour threshold: Not determined.

pH-value: No further information available.
Melting point/Melting range: No further information available.
Boiling point/Boiling range: No further information available.
Flash point: 35.5 °C (TCC)
Lower explosive limit: 1.0 Vol %
Upper explosive limit: 9.5 Vol %
Vapour pressure: No further information available.
Density at 25 °C: <1.0 g/cm³
Solubility in / Miscibility with water: No further information available.
SECTION 10: Stability and reactivity

10.1 Reactivity
10.2 Chemical stability
Thermal decomposition / conditions to be avoided: To avoid thermal decomposition do not overheat.
10.3 Possibility of hazardous reactions: No dangerous reactions known under normal conditions of use.
10.4 Conditions to avoid: Keep away from heat, sparks, flame, high temperature.
10.5 Incompatible materials: Oxidizing agents
10.6 Hazardous decomposition products:
CO, NOx
Danger of toxic fluorine based pyrolysis products.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity no data
LD/LC50 values relevant for classification:
872-50-4 N-Methyl-2-pyrrolidone
Oral LD50 3914 mg/kg (Rat)
Dermal LD50 8000 mg/kg (Rabbit)
1330-20-7 Xylene
Oral LD50 4300 mg/kg (Rat)
Dermal LD50 2000 mg/kg (Rabbit)
108-88-3 Toluene
Oral LD50 5000 mg/kg (Rat)
Dermal LD50 12124 mg/kg (Rabbit)
Inhalative LC50/4 h 5320 ppm (Mouse)
Primary irritant effect
on the skin: Irritant to skin and mucous membranes.
on the eye: Irritating effect.
Sensitisation: No sensitising effects known.
Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant
CMR effects
Repr. 1B
Germ cell mutagenicity: No further information available.
Carcinogenicity: No further information available.
Reproductive toxicity: No further information available.
Aspiration hazard: No further information available.
Specific target organ toxicity - single exposure: No further information available.
Specific target organ toxicity - repeated exposure: No further information available.

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity: No further relevant information available.
12.2 Persistence and degradability: No further relevant information available.
12.3 Bioaccumulative potential: No further relevant information available.
12.4 Mobility in soil: No further relevant information available.
Safety data sheet

Trade name: THINNER for POLYFLON PTFE TC-7100 SERIES (TT7100)

12.5 Results of PBT and vPvB assessment
PBT: No further relevant information available.
vPvB: No further relevant information available.
12.6 Other adverse effects: No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation: Disposal must be made according to official regulations.
Uncleaned packaging
Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number:
ADR, IMDG, IATA UN1263
14.2 UN proper shipping name:
ADR: 1263 PAINT
IMDG, IATA PAINT
14.3 Transport hazard class(es):
ADR, IMDG, IATA

Class: 3 Flammable liquids.
Label: 3

14.4 Packing group:
ADR, IMDG, IATA III

14.5 Environmental hazards:
Marine pollutant: No
Danger code (Kemler): 30
EMS Number: F-E,S-E

14.6 Special precautions for user:
Warning: Flammable liquids.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:
Not applicable.
Transport/Additional information:
Avoid direct sunlight. Make sure of no damage, corrosion, leaks on the receptacles.
Take necessary measures for preventing cargo shift.

ADR
Limited quantities (LQ): 5L
Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
Transport category: 3
Tunnel restriction code: D/E

IMDG
Limited quantities (LQ): 5L
Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation": UN1263, PAINT, 3, III

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
No further relevant information available.
Safety data sheet

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Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS02  GHS07  GHS08

Signal word Danger

Hazard-determining components of labelling:
- N-Methyl-2-pyrrolidone
- Toluene

Hazard statements
- H226 Flammable liquid and vapour.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H360D May damage the unborn child.
- H335 May cause respiratory irritation.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H304 May be fatal if swallowed and enters airways.

Precautionary statements
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations
No further information available.

Other regulations, limitations and prohibitive regulations:
No further information available.

Substances of very high concern (SVHC) according to REACH, Article 57:

872-50-4 N-Methyl-2-pyrrolidone

SECTION 16: Other information

The product is for the industrial use only. We do not guarantee the safety in case the product is used for the other purposes. When using the product for health-care application or food/feed application, consult us in advance.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS: EHS Department
Contact: http://www.daikin.com/

Abbreviations and acronyms:
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- Flam. Liq. 3: Flammable liquids, Hazard Category 3
- Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
- Repir. 1B: Reproductive toxicity, Hazard Category 1B
- STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
- STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
- Asp. Tox. 1: Aspiration hazard, Hazard Category 1