

# Safety Data Sheet

Enacted data : 1993/7/12

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## 1. Product and Corporate Information

Reference number 5G-003  
 Product name FULLON THINNER TX-S  
 Company name FURUTO INDUSTRIAL Co., LTD  
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## 2. Hazards Identification

### GHS classification

#### Physical and Chemical Hazards

Flammable liquid : Category 2 Toluene, MEK, MIBK  
 : Category 3 Cyclohexanone

#### Health Hazards

Acute toxicity : oral : Category 4 Cyclohexanone  
 Acute toxicity : transdarmal : Category 3 Cyclohexanone  
 Acute toxicity : inhalation gas : Category 4 Toluene, MEK  
 : Category 3 MIBK, Cyclohexanone  
 Skin corrosion/irritation : Category 2 Toluene, MEK, Cyclohexanone  
 Serious eye damage/eye irritation : Category 2B Toluene, MEK

Germ cell mutagenicity : Category 2 Cyclohexanone  
 Carcinogenicity : Category 2 MIBK  
 Genotoxicity : Category 1A Toluene  
 : Category 2 Cyclohexanone

#### Specific target organ (single exposure)

Central nervous system : Category 1 Toluene

Respiratory irritant : Category 3 Toluene, MEK, MIBK  
 Narcotic effects : Category 3 Toluene, MEK, MIBK, Cyclohexanone  
 Kidney : Category 2 MEK  
 Respiratory system : Category 2 Cyclohexanone

#### Specific target organ (repeated exposure)

Central nervous system : Category 1 Toluene, MEK, MIBK  
 Nervous system : Category 1 MEK  
 Kidney : Category 1 Toluene  
 Bone : Category 1 Cyclohexanone

Aspiration hazards : Classification not possible

Aquatic environmental hazards (acute) : Category 2

Aquatic environmental hazards (chronic) : Category 3

Hazards for ozone layer : Classification not possible

### GHS label element



Signal word	: DANGER
Hazards statement	: Highly flammable liquid and vapor : Harmful if inhaled (vaper) : Skin irritation : May cause an allergic skin reaction : Serious eye irritation : May cause drowsiness or dizziness : Suspected of causing genetic defects : Suspected of causing cancer : May damage fertility or the unborn child : May cause harm to breast-fed children : Cause damage to central nervous system : May cause damage to the respiratory and kidneys : Cause damage to nervous system and kidneys through prolonged or repeated exposure : May cause damage to bones through prolonged or repeated exposure : Toxic to aquatic life : Harmful to an aquatic life with long lasting effects
Precautionary statement [Prevention]	: Obtain special instructions before use : Do not handle until all safety precautions have been read and understood. : Do not eat, drink or smoke when using this product. : Keep away from ignition sources such as heat / sparks / open flames / hot surfaces. -No smoking. : Use explosion-proof electrical / ventilating / lighting equipment. : Use a tool that does not cause a fire. : Take precautionary measures against electrostatic discharge. : Do not breathe dust / fume / gas / mist / vapors / spray : Wear protective gloves / protective clothing / protective glasses / protective surface. : Use only outdoors or in a well-ventilated area. : Avoid release to the environment. : Avoid contact during pregnancy / nursing. : Wash your hands often after handling. : Do not take contaminated working clothes out of the work place.

## 3. Composition / information on ingredients

Mixture / Substance selection : Mixture

## Ingredient and concentration

Ingredient name	CAS No.	Content(%)
Toluene	108-88-3	27.0 – 33.0
Methyl ethyl ketone	78-93-3	31.0 – 37.0
Methyl isobutyl ketone	108-10-1	27.0 – 33.0
Cyclohexanone	108-94-1	4.5 – 7.5

## 4. First aid measures

If in eyes	: Rinse cautiously with water for several minutes. : Remove contact lenses, remove it out if easy. And rinse, continue. : If eye irritation persists, get medical advice / attention.
If on skin	: Take off all contaminated clothing and shoes, rinse affected area with water or tepid water with plenty water with soap. : If skin irritation or exanthema occurs, get medical advice / attention.
If inhaled	: Remove person to fresh air and keep comfortable for breathing. : If feel unwell, get medical advice / attention. : If in a breathing stop or dyspnea, loosen clothing, secure the breathing respiratory tract and practice artificial respiration. And get medical advice.
If swallowed	: Wash mouth inside, and get medical advice / attention, immediately.

## 5. Fire-fighting measures

	: Extremely flammable. Easily ignited by heat, sparks and flame. : May cause the container to explode by heating : May cause irritating, toxic or corrosive gases by fire : Highly flammable liquid and vapor
Extinguishing media	: By water spray, powder medicine, carbon dioxide, dry sand, fire foam
Specific fire fighting method	: If performing the fire extinguishing work not to touch the harmful gas, approach from windward and use the suitable protection and. : The large-scale fire nearby the material, fight a fire keeping apart from the fire, with the water spray or fire foam : Do not treat the straight discharge water
Protection of firefighters	: Wear appropriate protective equipment (gloves, glasses, mask, etc.) when extinguishing a fire.

## 6. Accidental release measures

: In the case of a small quantity spillage, treat with it with an adsorbent (ex. sawdust, soil, sand, waste) and put it in an empty container.  
 : In the case of a large quantity spillage, to lead and treat to safe place by bank of soil or sandbag work.  
 : In the treatment working, put the protector on to prevent splash of spillage attaching to skin or inhalation the gas  
 : Remove immediately, the naked light or high temperature ignition source in the neighborhood.  
 : Do not spill the material, spillage which flowed into the rivers, adversely affects environment.

## 7. Handling and storage

Handling	
Instruction for the safe handling	: Obtain special instruction before use, and do not handle until all safety precautions have been read and understood. : Handle with the suitable protector (glasses and impermeability gloves, et al), and in a well-ventilated area. : Do not allow the toppling over, fall or shock. : Do not allow eating, drinking or smoking to treat this material. : Rinse hands well, after handling. : Do not allow to release for environment.
Storage	
Instruction for the safe storage	: Keep container tight seal up and in indoor, avoid direct sunlight and over-humidification. : Keep cool and well-ventilated. : Check container outbreak of leak, and prevent the topping over, fall and cargo shift : Keep separate it from an oxidizer, naked light or high temperature source. : Lock it to store.

## 8. Exposure control / personal protection

## Control parameters

(The adopted value of this product is not set. The data of each ingredients as follow are reference.)

Ingredient name	Adopted value(ppm)
Toluene	20
Methyl ethyl ketone	200
Methyl isobutyl ketone	20
Cyclohexanone	20

## Occupational Exposure Limits

Ingredient	ACGIH		Japanese Society of Occupational Health	
	TWA(ppm)	TWA(mg/m <sup>3</sup> )	(ppm)	(mg/m <sup>3</sup> )
Toluene	20	—	50	188
Methyl ethyl ketone	200 300 (U.L.)	—	200	590
Methyl isobutyl ketone	20 75 (U.L.)	82 307 (U.L.)	50	200
Cyclohexanone	20	50	25	100

## Engineering controls

: Caution: No fire  
 : It's desirable to install local exhaust ventilation system and/or general ventilation systems  
 : Ensure the hand and eye-washing stations are installed near the working area, and indicate the place.

## Personal protection

: Wear an appropriate respiratory protective equipment's, protective gloves, protective glasses and protective clothes.

## 9. Physical and chemical properties

Appearance : Clear and Colorless liquid  
 Flash point : -9°C (Tag closed cup)  
 Fire point : 505°C (ref:MEK)  
 Explosion limit : 1.8-11.5% (ref:MEK)  
 Boiling point : 80°C (ref:MEK)  
 Solubility : —  
 Melting point : -86°C (ref:MEK)  
 Specific gravity : 0.80 (ref:MEK)

## 10. Stability and Reactivity

Stability : Stable under normal storage / handling condition,  
 Reaction of danger or harmful : Fire and explosion may be caused with a strong oxidizer and an inorganic acid intensely.  
 Condition of avoid : Do not allow the contact of dangerous material and overheat.  
 Danger of contact : Strong acid, oxidizer  
 Product of danger or harmful : Carbon monoxide and carbon dioxide are caused by the chemical reaction of the product.

## 11. Toxicological information

: No data (See Section 2)

## 12. Environmental impact information

: No data (See Section 2)

## 13. Disposal considerations

- : Dispose of in accordance with relevant regulations and local government standards.
- : Dispose of contents and containers to a waste disposal company licensed by the prefectural governor.
- : When burned, harmful gases such as carbon monoxide and carbon dioxide are generated, so incinerate with the incinerator equipped with exhaust gas treatment equipment.
- : When disposing, follow the instructions in paragraph 2 and general flammable and hazardous liquid precautions.

## 14 Transport information

- UN No. and UN class
- UN class : Class 3:flammable liquid P.G2
- UN No. : 1993 (Medium flash point flammable liquid with no other hazards)
- Product name : Not applicable
- Special safety measures : Make sure there are no leaks from the container when transporting it, and load it up so that it does not fall over, fall, or damage, and ensure prevention of load collapse
- : Transporting should follow the precautions in paragraph 2 and the general precautions for flammable hazardous liquids.
- : Avoid to carry this, with peroxides and oxidants.

## 15 Regulatory information (However in JAPAN)

- Fire Service Act : Category IV :inflammable liquids :(ii) Class I petroleums Toluen, MEK, MIBK
- : Category IV :inflammable liquids :(ii) Class II petroleums Cyclohexanone
- Industrial Safety and Health Act
- Order for Enforcement of Industrial Safety and Health Act
- : Appended Table 1: Dangerous Substances :(iv) Flammable substances
- Toluen, MEK, MIBK, Cyclohexanone
- : Contains the substance to be labeled Toluen, MEK, MIBK, Cyclohexanone
- : Contains the substance to be notified Toluen, MEK, MIBK, Cyclohexanone
- Ordinance on the Prevention of Organic Solvent Poisoning
- : Second-class organic solvents Toluen, MEK, Cyclohexanone
- : Section 2 Regulations concerning Dangerous Goods Harmful Substances
- Order for Enforcement of Industrial Safety and Health Act
- : Specified Chemical Substances :Group-2 Substances MIBK
- Law concerning Pollutant Release and Transfer Register / PRTR Law
- : Contains the relevant substance Toluen, MIBK
- Ship Safety Act
- : Middle flash point flammable liquid (class 3.2) Toluen, MEK, MIBK, Cyclohexanone

## 16. Other information

- i The "Safety Data Sheet" is a brief summary of the precautions for safe use of our products, and assumes normal handling.
- ii The "safety data sheet" is based on the findings up to the present and does not guarantee the completeness of the information, and may be revised as needed. Please be aware in advance.
- iii The information contained in the "Safety Data Sheet" does not guarantee the product specification or quality.
- iv Please refer to the "Safety Data Sheet" etc. for the conditions under which this product is used and consider at the user's responsibility.