

February 23 2018

SAFETY DATA SHEET

NAME OF MANUFACTURE : FURUTO INDUSTRIAL CO., LTD.

ADDRESS : 12-1, YOSHIMA INDUSTRIAL PARK, IWAKI 970-1144 JAPAN

NAME OF SECTION : SALES DEPARTMENT

TELEPHONE NUMBER : +81 246-36-7151

FACSIMILE NUMBER : +81-246-36-7157

REFERENCE NUMBER : 5G-002

PRODUCT NAME : FULLON TEX TX-1

HEALTH HAZARD

GHS CLASSIFICATION CRITERIA FOR SUBSTANCES - 1

CHEMICAL NAME	ACUTE TOXICITY (ORAL)	ACUTE TOXICITY (DERMAL)	ACUTE TOXICITY (GASES)	ACUTE TOXICITY (VAPOURS)	ACUTE TOXICITY (DUSTS AND MISTS)	SKIN CORROSION /IRRITATION
TOLUENE	CATEGORY 5	OUT OF CATEGORY	OUT OF CATEGORY	CATEGORY 4	OUT OF CATEGORY	CATEGORY 2
METHYL ETHYL KETONE	CATEGORY 5	OUT OF CATEGORY	OUT OF CATEGORY	CATEGORY 5	OUT OF CATEGORY	CATEGORY 2
METHYL ISOBUTYL KETONE	CATEGORY 5	OUT OF CATEGORY	OUT OF CATEGORY	CATEGORY 3	OUT OF CATEGORY	OUT OF CATEGORY
CYCLO HEXANONE	CATEGORY 4	CATEGORY 3	OUT OF CATEGORY	CATEGORY 3	OUT OF CATEGORY	CATEGORY 2

GHS CLASSIFICATION CRITERIA FOR SUBSTANCES - 2

CHEMICAL NAME	SERIOUS EYE DAMAGE/EYE IRRITATION	RESPIRATORY OR SKIN SENSITIZATION	GERM CELL MUTAGENICITY	CARCINOGENICITY
TOLUENE	CATEGORY 2B	OUT OF CATEGORY	OUT OF CATEGORY	OUT OF CATEGORY
METHYL ETHYL KETONE	CATEGORY 2B	OUT OF CATEGORY	OUT OF CATEGORY	OUT OF CATEGORY
METHYL ISOBUTYL KETONE	CATEGORY 2B	OUT OF CATEGORY	OUT OF CATEGORY	CATEGORY 2
CYCLO HEXANONE	CATEGORY 2A	OUT OF CATEGORY	CATEGORY 2	OUT OF CATEGORY

GHS CLASSIFICATION CRITERIA FOR SUBSTANCES - 3

CHEMICAL NAME	REPRODUCTIVE TOXICITY	SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE)	SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (REPEATED EXPOSURE)	ASPIRATION
TOLUENE	CATEGORY 1A	CATEGORY 1	CATEGORY 1	CATEGORY 1
METHYL ETHYL KETONE	OUT OF CATEGORY	CATEGORY 1	CATEGORY 1	CATEGORY 2
METHYL ISOBUTYL KETONE	OUT OF CATEGORY	CATEGORY 3	CATEGORY 1	CATEGORY 2
CYCLO HEXANONE	CATEGORY 2	CATEGORY 1	CATEGORY 1	CATEGORY 2

ENVIRONMENTAL HAZARD

GHS CLASSIFICATION CRITERIA FOR SUBSTANCES - 1

CHEMICAL NAME	HARARDOUS TO AQUATIC ENVIROMENT (ACUTE AQUATIC TOXICITY)	HARARDOUS TO AQUATIC ENVIROMENT (CHRONIC AQUATIC TOXICITY)
TOLUENE	CATEGORY 2	OUT OF CATEGORY
METHYL ETHYL KETONE	OUT OF CATEGORY	OUT OF CATEGORY
METHYL ISOBUTYL KETONE	OUT OF CATEGORY	OUT OF CATEGORY
CYCLO HEXANONE	OUT OF CATEGORY	OUT OF CATEGORY

LABEL ELEMENTS

PICTOGRAM OR SYMBOL :



SIGNAL WORD : DANGER

HAZARD STATEMENT : HIGHLY FLAMMABLE LIQUID AND VAPOUR

MAY BE HARMFUL IF SWALLOWED (ORAL)

HARMFUL IF INHALED (VAPOR)

CAUSES SKIN IRRITATION

CAUSES EYE IRRITATION

MAY DAMAGE FERTILITY OR THE UNBORN CHILD

MAY CAUSE DAMAGE TO CENTRAL NERVOUS SYSTEM

MAY CAUSE DROWSINESS AND DIZZINESS

MAY CAUSE RESPIRATORY IRRITATION

CAUSE DAMAGE TO CENTRAL NERVOUSE SYSTEM, KIDNEY, LIVER THROUGH PROLONGED OR REPEATD EXPOSURE

MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS

TOXIC TO AQUATIC LIFE

.COMPOSITION/INFORMATION ON INGREDIENTS

(1) SUBSTANCE/MIXTURE : MIXTURE OF TOLUENE,METHYL ETHYL KETONE,
METHYL ISOBUTYL KETONE AND 20~26% OF VINYL CHLORIDE RESIN.

(NOTE) VINYL CHLORIDE RESIN CONTAINED IN THE PRODUCT IS NOT INFORMED
HEREUNDER AS IT IS NOT APPLICABLE.

(2)CHEMICAL NAME	TOLUENE	METHYL ETHYL KETONE	METHYL ISOBUTYL KETONE	CYCLO HEXANONE
(3)SYNONYMS	METHYL- BENZENE	2-BUTANONE MEK	ISOPUROPYLACETONE MIBK	POMELIN KETONE
(4)CAS RESISTRY NUMBER	108-88-3	78-93-3	108-10-1	108-94-1
(5)INGREDIENTS AND COMPOSITION	20~26%	22~28%	20~26%	3~6%
(6)CHEMICAL FORMULA	C ₆ H ₅ CH ₃	CH ₃ COCH ₂ CH ₃	CH ₃ COCH ₂ CH(CH ₃) ₂	C ₆ H ₁₀

(7) UN CLASS : 3 (FLAMMABLE LIQUIDS)

(8) UN NUMBER : 1993(P.G.2) (MIDDLE FLASH POINT FLAMMABLE LIQUIDS WITHOUT OTHER
HAZARDS) C₆H₁₀

HAZARD IDENTIFICATION

- (1) CLASS NAME OF HAZARDOUS CHEMICALS FOR SAFETY DATA SHEET IN JAPAN :
FLAMMABLE LIQUID, MISCELLANEOUS DANGEROUS SUBSTANCES
- (2) PHYSICAL AND CHEMICAL HAZARDS : FLAMMABLE LIQUID, MAY FORM
EXPLOSIVE AIR MIXTURE.
- (3) ADVERSE HUMAN HEALTH HAZARDES : LIQUID OR VAPOUR IS COLLECT FORTSIZE
TO SKIN, EYES AND THROAT.INHALATION OF OENCE VAPOUR NARCOTIZES CAUSES
NARCOSIS.

FIRST-AID MEASURES

- (1) EYE CONTACT : GENTLY RINSE THE AFFECTED EYES WITH CLEAN WATER
FOR AT LEAST 15 MINUTES . REFER FOR MEDICAL ATTENTION BY
EYE-SPECIALIST AS QUICKLY AS POSSIBLE IF PAIN PERSISTS.
: WHEN RINSING, HOLD THE EYELIDS OPEN IN ORDER TO BETTER
REACH ALL AREAS OF THE EYELIDS AND THE EYEBALL.
- (2) SKIN CONTACT : REMOVE ALL CONTAMINATED CLOTHING, SHOES AND SOCKS
FROM THE AFFECTED AREAS AS QUICKLY AS POSSIBLE.
WASH THE AFFECTED AREAS UNDER TEPID RUNNING WATER. THEN WASH OFF SKIN
USING A MILD SOAP.

- (3) INHALATION : REMOVE THE VICTIM WHO INHALED THE LARGE AMOUNT OF VAPOUR FROM THE CONTAMINATION IMMEDIATELY TO FRESH AIR.
- : IF BREATHING HAS STOPPED, OR IS WEAK OR IRREGULAR, OPEN HIS AIRWAY. LOOSEN HIS COLLAR AND BELT AND ADMINISTER ARTIFICIAL RESPIRATION.
- : KEEP THE VICTIM WARM ; COVERED WITH A BLANKET AND QUIET.
- : IMMEDIATELY REFER FOR MEDICAL ATTENTION.
- (4)INGESTION : DO NOT INDUCE VOMITING AS THIS MAY INCREASE THE RISK OF ASPIRATION OF THE LIQUID.
- : IMMEDIATELY REFER FOR MEDICAL ATTENTION.
- : MAY RINSE MOUTH WITH WATER.
- : DO NOT GIVE ANY UNCONSCIOUS PERSON ANYTHING TO DRINK.

FIRE-FIGHTING MEASURES

- (1) SPECIFIC HAZARDS WITH REGARDS TO FIRE-FIGHTING MEASURES
- FOR SMALL FIRES DRY CHEMICAL POWDER ,CARBON DIOXIDE OR DRY SAND SHOULD BE USED.
 - FOR LARGE FIRES IT IS EFFECTIVE TO CUT OFF FROM AIR USING FOAM.
 - A FIRE HOSE WATER MAY SPREAD FIRE.
 - FOR NEAR-BY FIRE APPLY WATER AROUND THE FACILITIES TO COOL.
 - MOVE CONTAINERS FROM FIRE AREAS AS QUICKLY AS POSSIBLE IF IT CAN BE DONE WITHOUT RISK.
 - FIREFIGHTERS SHOULD WEAR PROPER PROTECTIVE EQUIPMENT.
 - EVACUATE NON ESSENTIAL PERSONNEL FROM FIRE AREAS.
- (2) EXTINGUISHING MEDIA
- DRY CHEMICAL POWDER ,CARBON DIOXIDE , FORM AND/OR DRY SAND.

ACCIDENTAL RELEASE MEASURES

- SHUT OFF ALL SOURCES OF IGNITION : NO FLARES/MATCHES, SMOKING OR FLAMES IN AREA.
- PREPARE FIRE-FIGHTING EQUIPMENTS, TOOLS, MEDIAS.
- WEAR PROPER PROTECTIVE EQUIPMENT.
- FOR SMALL SPILLS ABSORB IT WITH SAWDUST, RAGS OR SAND, THEN PLACE IN A CONTAINER.
- FOR LARGE SPILLS OAM OFFTHE AREA CONTAINER AND COVER IT WITH FOAM PICK UP AND PLACE IN ACONTAINER.
- USE NONSPARKING TOOLS.

HANDLING AND STORAGE

(1) HANDLING

- SHUT OFF FLARES, SMOKING, FLAMES, ELECTROSTATIC CHARGES, SHOCK SPARKING AND OTHER SOURCES OF IGNITION.
- PREVENT SPILLS.
- WEAR PROPER PROTECTIVE EQUIPMENT TO AVOID CONTACT WITH SKIN OR BREATHE VAPOUR.

(2) STORAGE

- KEEP AWAY FROM SUNLIGHT OR HEAD ALONG WITH ABOVE MENTIONED PRECAUTIONS.

EXPOSURE CONTROL/PERSONAL PROTECTION

(1) CONTROL PARAMETERS

INGREDIENT	TOLUENE	METHYL ETHYL KETONE	METHYL ISOBUTYL KETONE	CYCLOHEXANONE
CONTROL LIMIT	20ppm	200ppm	20ppm	20ppm

(2) ENGINEERING MEASURES

- HANDLE IN A TOTALLY ENCLOSED SYSTEM OR EQUIPMENTS AS POSSIBLE OR USE WITH LOCAL EXHAUST VENTILATION.
- MAKE AVAILABLE SHOWER AND EYE WASH NEAR TO THE WORK AREA.

(3) PERSONAL PROTECTIVE EQUIPMENT

- RESPIRATORY PROTECTION : CHEMICAL CARTRIDGE RESPIRATOR WITH AN ORGANIC VAPOUR CARTRIDGE, AIRLINE RESPIRATOR OR BREATHING APPARATUS FOR OENSE VAPOUR.
- EYE,FACE PROTECTION : SAFETY GLASSES OR FACE SHIELD.
- SKIN PROTECTION : OIL-RESISTANT(IMPERVIOUS)GLOVES, BOOTS AND APRON (UNIT-ELECTOROSTATIC CHARGES).

PHYSICAL AND CHEMICAL PROPERTIES

- (1) APPEARLANCE : BLUE VISCOUS LIQUID
- (2) SOLUBILITY IN WATER : SLIGHTLY
- (3) SOLUBILITY IN OTHERS : SOLUBLE IN ORGANIC SOLVENT
- (4) DENSITY : 0.87 (reference : TOLUENE)
- (5) BOILING POINT : 110°C (reference : TOLUENE)
- (6) MELTING POINT : -95°C (reference : TOLUENE)

PHYSICAL HAZARD (STABILITY AND REACTIVITY)

- (1) FLASH POINT : 1.0°C (reference : TOLUENE)

(2) REACTIVITY : STABLE UNDER NORMAL TEMPERATURE AND PRESSURES.

TOXICOLOGICAL INFORMATION

(1) TOLUENE

• IRRITANT PROPERTY : LIQUID OR VAPOUR IS IRRITATING TO SKIN, EYES AND THROAT.

: DEGREASING FROM SKIN.

• ACUTE TOXICITY : MOUSE INHALATION LC₅₀ 5,300ppm/8hr

: RAT ORAL LD₅₀ 5,000mg/kg

: HUMANS INHALATION 50ppm(8hr) HEAD ACHE

NAUSEA 200ppm LIGHT TIREDNESS, WEAKNESS SENSORY DISTURBANCE OF SKIN. INHALATION CAUSES HEADACHE, DIZZINESS, FATIGUE, AND BALANCE DISTURBANCE.

DENCE VAPOUR CAUSES NARCOSIS AND UNCONSCIOUSNESS OR MORATOLITY OCCASIONALLY.

(2) MEK

• IRRITANT PROPERTY : REPEATED CONTACT CAUSES DERMATITIS.

: DENCE VAPOUR IS IRRITATING TO THE MUCOUS MEMBRANE OF EYES, NOSE, THROAT.

: INHALATION OF VAPOUR CAUSES NARCOSIS.

• CHRONIC TOXICITY : NO EVIDENCE TO CAUSE EFFECTS ON THE NERVOUS SYSTEM UNDER LIMIT ISSUED BY JAPAN ASSOCIATION OF INDUSTRIAL HEALTH.

(3) MIBK

• IRRITANT PROPERTY : VAPOUR IS IRRITANT AND NARCOTIC

• ACUTE TOXICITY • MOUSE : INHALATION LC₅₀ 23,300mg/m³

: RAT ORAL LD₅₀ 2,080mg/kg

: HUMANS DENCE VAPOUR IS IRRITATING TO THE

CONJUNCTIVA, MUCOUS MEMBRANE OF THROAT AND NOSE, MUCH INHALATION CAUSES SYMPTOMS OF NARCOSIS, WEAKNESS, HEADACHE, NAUSEA, DIZZINESS AND OTHERS.

(4) CYCLOHEXANONE

• IRRITANT PROPERTY : IRRITATING TO THROAT AT 50ppm WITH UNPLEASANT FEELING. IRRITATING TO EYES AND NOSE AT 70ppm.

ECOLOGICAL INFORMATION

(1) BIODEGRADABILITY

TOLUENE : GOOD BIODEGRADABILITY IS NOTED BY CHEMICAL INSPECTION AND TESTING EXISTING CHEMICALS BASED ON THE CSCL JAPAN.

MEK : NO INFORMATION

MIBK : SAME AS TOLUENE

(2) FISH TOXICITY

TLm(24-96 hr)

TOLUENE : 20-60mg/l

MEK : NO INFORMATION

MIBK : 460mg/l

(3) OTHER INFORMATION ON ECOTOXICITY

OCTANOL/WATER DISTRIBUTION PARAMETER

TOLUENE : 2.69(20°C)

MEK : NO INFORMATION

MIBK : NO INFORMATION

TRANSPORT INFORMATION

- APPLY CORRESPONDINGLY TO THE DESCRIPTION UNDER HANDLING AND STORAGE ALONG WITH GENERAL CAUTION ON FLAMMABLE HAZARDOUS LIQUIDS.
- FOLLOW ALL REGULATIONS IN YOUR COUNTRY.

DISPOSAL INFORMATION

- APPLY CORRESPONDINGLY TO THE DESCRIPTION UNDER HANDLING AND STORAGE ALONG WITH GENERAL CAUTION ON FLAMMABLE HAZARDOUS LIQUIDS.
- ABSORB WITH DIATOMACEOUS EARTH OR OTHER MATERIALS AND BURN LITTLE BY LITTLE WITH AN INCINERATOR. CONSIDER CHLORINE GAS GENERATED BY BURNING.

REGULATORY INFORMATION

FOLLOW ALL REGULATIONS IN YOUR COUNTRY.

OTHER INFORMATION

- 11691 CHEMICAL PRODUCTS (1991) THE CHEMICAL DAILY CO, LTD-
- SDS ISSUED BY EACH MANUFACTURER OF INGREDIENTS IN THE PRODUCT.

MENTION IN ADDITION

THIS INFORMATION IS OFFERED AS A REFERENCE TO INSURE SAFETY HANDLINGS OF THE PRODUCT, BUT NO WARRANTY IS MADE, AS THIS MADE OUT PRESUPPOSING GENERAL HANDLINGS. THE PRODUCT SHOULD BE PROPERLY HANDLED AND USED ON USER'S OWN RESPONSIBILITY REFERING TO THIS INFORMATION.