

# Safety data sheet (SDS)

## 1. Products and company identification

Product name; Melstrip TI-3991  
 SDS code; 100847  
 Recommended usage; Surface finishing chemical  
 Supplier's name; Meltex Inc.  
 Supplier's address; 4-8-2, Nihonbashi Honcho, Chuo-ku, Tokyo, Japan  
 Contact; Tel; + 81-48-665-2050  
 E-Mail; sales@meltex.com

## 2. Hazards identification

### GHS classification

FLAMMABLE LIQUIDS	Classification not possible	
OXIDIZING LIQUIDS	Classification not possible	
OXIDIZING SOLIDS	Classification not possible	
CORROSIVE TO METALS	Classification not possible	
ACUTE TOXICITY	Oral	Classification not possible
	Skin	Classification not possible
	Inhalation(steam)	Classification not possible
	Inhalation(mist)	Classification not possible
SKIN CORROSION/IRRITATION	Category 2	
SERIOUS EYE DAMAGE/EYE IRRITATION	Category 1	
RESPIRATORY SENSITIZATION	Classification not possible	
SKIN SENSITIZATION	Classification not possible	
GERM CELL MUTAGENICITY	Classification not possible	
CARCINOGENICITY	Classification not possible	
TOXIC TO REPRODUCTION	Classification not possible	
SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE)	Category 2 (respiratory system)	
SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (REPEATED EXPOSURE)	Classification not possible	
AQUATIC TOXICITY	Acute; Classification not possible / Long-term; Classification not possible	
others	HAZARDOUS TO THE OZONE LAYER: Classification not possible	

### GHS label elements

Signal word

<b>Danger</b>
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Hazard statement

H315- Causes skin irritation

H318- Causes serious eye damage

H371- May cause damage to organs(respiratory system)

Disclaimer

Read Material Safety Data Sheet (SDS) before using this product.

The principle of this product is to use it under a recommendation usage / a recommended condition.

When handling this product, wear an appropriate protection tool such as the protective gloves and protective glasses.

Treat the emergency referring to SDS etc. , and report the situation of wounded people to the doctor.

When this product adhered to eyes or the skins, flush it in a large amount of flowing clean water.

When this product inhaled, move to the place with fresh air, and make it to the posture that breathes easily.

Receive doctor's diagnosis/allowance at once after treating the emergency.

Use before expiration date written to the label.

Please dispose of the product immediately which pass over the expiration date written to the label.

Avoid direct sunlight, keep in the indoor place with cool and good ventilation.

When keeping this product, obey the domestic law and the local ordinance, etc.

When abandoning contents and the container of the product, obey the domestic law and the local ordinance, etc.

When abandoning this product, consign the business to a special waste management trader who obtains public permission.

**3. Composition/information on ingredients**Substance/Preparation: Mixture

Chemical name	Concentration (wt %)	CAS No.
POTASSIUM HYDROXIDE	1<<5	1310-58-3
Stabilizer	25<<35	-
WATER	60<<70	7732-18-5

## 4. First-aid measures

### Inhalation

Transfer the patient to the place of fresh air at once and keep warm and quiet. Give the patient prompt medical attention.

At breath stopping or almost stopping, loosen clothes and practice artificial respiration.

### Skin contact

Take off immediately all contaminated clothes. Wash immediately skin with amount of water or shower.

In condition of a significant inflammation, seek medical advice immediately.

### Eye contact

Rinse continuously with amount of water above 30 minutes, as far as possible. Remove contact lenses if easily removable. The eyelid is picked up and the conjunctiva dome is washed very well.

Don't neutralize by chemicals.

Surely seek advice of the ophthalmologist.

### Ingestion

Do not induce vomiting forcibly. Rinse the mouth very well with water at once. Seek medical advice surely.

Never give water and never induce vomiting, when unconsciousness.

## 5. Fire-fighting measures

### Extinguishing media

Water in large amount, Water spray, Carbon dioxide, Foam, Powder, Dry-sand

### Specific hazards

On burning and/or heat-decomposing, possible form irritating or toxic fumes (or gases).

### Specific methods

The entries other than parties concerned are prohibited around the fire generation place.

Be sure to wear the protection tool for fire fighting.

In case of fire in the surroundings, move the product to the place to which the influence of a fire does not promptly extend if the product can be moved. If the product can not be moved, spray water to the container for cooling to prevent the container breakage and ignition by heat.

Take necessary measures to prevent leak and/or scattering for the product and the extinction agent contained the product.

## 6. Accidental release measures

### Personal precaution

Evacuate the people other than parties concerned from the spilled area.

In case of indoors spilling, ventilating very well.

Wear the protection tool when disposing the leaking and spilled product.

In case of spilling in large quantities and/or the disaster may occur, refer for a related section immediately, and then tries to prevention of the disaster.

If you feel unwell, seek medical advice immediately.

### Environmental precaution

Do not release the spilled product to the environment.

If spilling in large quantities, prevent the outflow to the sewer, the drain ditch and the low ground.

### Recover / neutralization

Collect leaking and spilled product in sealable (or covered) containers as far as possible, and then absorb remaining product in inert absorbents such as dry sand and remove to safe place.

After scattering dilute hydrochloric acid, dilute sulfuric acid etc. in the leakage place, wash away remainder with amount of water.

## 7. Handling and storage

### Handling

Technical measures;

Wear suitable protective equipment.

Precaution;

Ventilation partial or all.

Handle little by little, and then prevent leaking, overflowing, dispersion and generating of fine particles.

After handling, wash your hands clearly and gargle enough.

Safe handling advice;

The entries other than parties concerned in work are prohibited.

A used empty container is washed without fail. The cleaning solution is not thrown into drain etc.

Avoid contact with incompatible products.

Never pour water. When diluting always add product slowly to the water.

### Storage

Technical measures;

Prevent the overturn and the fall.

Keep the rest only in the original container that is confirmed there is no damage.

Storage condition;

Keep in the well-ventilated(or possible ventilation) covered storage space and at the suitable temperature. Avoid direct sunlight.

Keep in accordance with regulations.

Incompatible products;

Acid and other dangerous products. (recommended above 1 m)

Packing materials(recommended);

The same material and label as an original container.

## 8. Exposure controls/personal protection

### Engineering measures

Shall have the whole exhaust equipment installed.

Shall have the eye-washing equipment and the gargle equipment to the vicinity of working area installed.

### Control parameters

Limit values;

POTASSIUM HYDROXIDE···2mg/m<sup>3</sup> (JSOH, 2008 fiscal year)

POTASSIUM HYDROXIDE···TWA - / STEL Ceiling ; 2mg/m<sup>3</sup> (ACGIH, 2008 fiscal year)

### Personal protective equipment

Keep protection tools that the number of each tool is more than the number of the worker. Maintain always effectively and cleanly.

The protective gear should be selected based on known or predictable hazard. We recommend the use of protective caps, protective respirators, face protection tools, non-permeable protective clothing and gloves, and rubber boots.

\* JSOH = Japan Society for Occupational Health

ACGIH = American Conference of Governmental Industrial Hygienists

## 9. Physical and chemical properties

Physical state	Liquid
Color	Colorless
Odor	None
pH(our measurement data)	above 14.0
Density(our measurement data)	1.2~1.3(g/cm <sup>3</sup> )
Solubility(water)	Soluble in water
Flash point(our measurement data)	Not measured
Explosion properties	There is not explosion property under a usual handling condition.
Melting point·Solidifying point/ Boiling point·Initial boiling point· Boiling range	Not measured
n-Octanol/Water partition coefficient	Not measured
Spontaneous ignition temperature· Decomposition temperature	Not measured
Vapor pressure·Vapor density	Not measured

## 10. Stability and reactivity

### Stability

It is stable under a usual handling condition.

### Possible hazardous reaction

Reacts violently with strong/medium acids.

## 11. Toxicological information

### Acute toxicity

POTASSIUM HYDROXIDE···LD50:273mg/kg(Intraperitoneal-mouse)

### Sensitivity

We do not have obtained any information.

### Carcinogenicity

We do not have obtained any information.

### Toxic to Reproduction

We do not have obtained any information.

### SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY(SINGLE EXPOSURE)

May cause damage to organs(respiratory system)

### SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY(REPEATED EXPOSURE)

We do not have obtained any information.

## 12. Ecological information

COD(our measurement data) ; 130,000(mg/L)

BOD(our measurement data) ; 110,000(mg/L)

Ecotoxicity

We do not have obtained any information.

Bioaccumulation potential

We do not have obtained any information.

Soil mobility

We do not have obtained any information.

Persistence/degradability \* Result by test methodology based on [Chemical Substances Control Law]

We do not have obtained any information.

Content of phosphorus/nitrogen

P:Not contain N:Not contain

## 13. Disposal considerations

Waste from residues

Dispose any use remainder in accordance with regulations and rules. Refer section 7.

Dispose of wastewater after dilution below 1 wt% in water. Avoid mixing with other waste.

Recommend consigning disposal to a special trader.

Follow the law as industrial waste subject to special control and process it when disposed this item or the running liquid.

Contaminated packaging

Dispose/recycle containers and packing material after cleaning very well.

Dispose any cleaning solution in accordance with regulations and rules. Refer section 7.

## 14. Transport information

Transport measures

Carry containers so as not to give the friction and the concussion.

Load containers so as not to give damage, fall, overturn, and then shift in the hold.

Do up the cap of the container on loading.

Refer section 7.

Keep in accordance with regulations and rules concerned transport.

International regulations (UN class and UN number)

IMDG Code \*1) ; Class 8 (Corrosive) / UN3266 (CORROSIVE LIQUID , BASIC , INORGANIC , N.O.S.) (POTASSIUM HYDROXIDE) / Packaging Group; 3

IATA—DGR \*2) ; Class 8 (Corrosive) / UN3266 (CORROSIVE LIQUID , BASIC , INORGANIC , N.O.S.) (POTASSIUM HYDROXIDE) / Packaging Group; 3

\*1) International Maritime Dangerous Goods Code

\*2) International Air Transport Association—Dangerous Goods Regulations

## 15. Regulatory information (Japanese Law)

Industrial Safety and Health Act /Provision of labeling ingredient substances	POTASSIUM HYDROXIDE
Industrial Safety and Health Act /Provision of notifiable substances	POTASSIUM HYDROXIDE
Industrial Safety and Health Act /Ordinance on Prevention of Hazards Due to Specified Chemical Substances /Specified Chemical Substances	Not applicable
Industrial Safety and Health Act /Ordinance on Prevention of Organic Solvent Poisoning	Not applicable
Chemical Substances Control Law /Specified Chemical Substances	Not applicable
Fire Service Act /Hazardous Materials	Not applicable
Poisonous and Deleterious Substances Control Law	Not applicable
Ship Safety Act /Regulations for the carriage and storage of dangerous goods in ship	Class 8 (Corrosive) /UN3266/Packaging Group; 3
Civil Aeronautics Act /Ordinance for Enforcement of the Civil Aeronautics Act	Class 8 (Corrosive) /UN3266/Packaging Group; 3
Marine Pollution Prevention Act /Marine pollutants	Not applicable
Export Trade Control Order /Appended table table 1(The 16th clause is excluded)	Not applicable
Export Trade Control Order /Appended table table 2	Not applicable
Water Quality Pollution Control Act /Hazardous material	Not applicable
Wastes Disposal and Public Cleansing Act /Industrial waste subject to special control	pH
Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management /Designated chemical substance	Not applicable

## 16. Other information

### References:

- 1) Current relevant laws and regulations
- 2) Chemical prevention guidelines aggregation / Japan Society service
- 3) " Chemical Safety Data Book " / Chemical Safety Study Group service
- 4) Industrial Hygiene Chemical Magazine /Japan Society for Occupational Health
- 5) International Chemical Safety Cards (ICSC) Compiler 's Guide / National Health Laboratory Chemicals Intelligence Director
- 6) EU Dangerous Substances Directive 67/548/EEC of the Council concerning the classification of Annex II , III, IV, IX
- 7) EU Dangerous Substances ( Fourth Edition ) / Japan Chemical Industry Ecology・Toxicology & Information Center
- 8) DANGEROUS PROPERTIES of INDUSTRIAL MATERIALS / N. Irving Sax
- 9) THE MERKINDEX \*12TH EDITION/MERCK RESEARCH Labs.
- 10) HANDBOOK OF ENVIRONMENTAL DATA ON ORGANIC CHEMICALS 3RD EDITION/ VERCHUEREN/WILEY
- 11) Chemical hazard data collection
- 12) Toxic Chemicals Handbook ( I ~ VI) / GDClayton, FEClayton service
- 13) Chemicals Substances Act to promote the entire data management
- 14) Manual of industrial poisoning (Enlarged edition)

This product is an industrial product to have aimed at the surface treatment of a metallic material etc. To the best of our knowledge, the information contained herein is accurate. However, we can not assume any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we can not guarantee that these are the only hazards, which exist.