

MATERIAL SAFETY DATA SHEET

<1. Product and company identification >

Product Name BOUJINTEX #2000 HARDENER
 Reference No. 4601-0011
 Company MIZUTANI PAINT CO., LTD.
 Address 03- 90, NISHIMIKUNI 4-CHOME YODOGAWA-KU, OSAKA, JAPAN
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<2. Hazards identification >

[GHS classification]

Flammable liquids : Category 3
 Acute toxicity (oral) : Category 5
 Acute toxicity (skin) : Category 5
 Acute toxicity (inhalation: gas) : Classification not possible
 Acute toxicity (inhalation: vapour) : Category 5
 Acute toxicity (inhalation: dust, mist) : Not classified
 Skin corrosion / irritation : Category 2
 Serious eye damages / eye irritation : Category 2
 Respiratory sensitization : Classification not possible
 Skin sensitization : Not classified
 Germ cell mutagenicity : Not classified
 Carcinogenicity : Category 2
 Reproductive toxicity : Category 1A
 Specific target organ toxicity single exposure : Category 1 (Central nervous system, Respiratory system
 Kidney, Liver, Blood)
 : Category 3 (Narcotic effects)
 Specific target organ toxicity: repeated exposure : Category 1 (Nervous system, Respiratory system,
 Central nervous system, Kidney, Liver, Optic organ)
 : Category 2 (Blood)
 Aspiration hazard : Not classified
 Aquatic toxicity (acute) : Category 2
 Aquatic toxicity (chronic) : Category 3
 [GHS label elements including precautionary statements]



Signal word : DANGER

[Hazard statement]

- Flammable liquid and vapour.
- May be harmful if swallowed.
- May be harmful in contact with skin.
- Causes skin irritation.
- Causes serious eye irritation.
- Suspected of causing cancer.
- May damage fertility or the unborn child.
- Causes damage to organs.
- May cause drowsiness or dizziness.
- Causes damage to organs through prolonged or repeated exposure.
- Toxic to aquatic life.
- Harmful to aquatic life with long lasting effects.

[Precautionary statements]

[Prevention]

- Keep container tightly closed.

- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Use explosion-proof electrical/ventilating/lighting/ equipment.
- Do not eat, drink or smoke when using this product.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Use only outdoors or in well-ventilated area.
- Wash hands thoroughly after handling.
- Avoid release to the environment.

[Response]

- In case of fire: Don't use water. Use the specific extinguishing media (Powder, CO₂, Foams).
- If in eyes: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a physician.
- If swallowed: Rinse mouth with water. Do not induce vomiting. Immediately call a physician.
- If on skin : Remove all contaminated clothing. Wash with plenty of soap and water.
- Arrange medical treatment by a physician on injured skin and painful parts.
- If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- If exposed or concerned, or if you feel unwell: Get medical advice/attention.
- At the leakage: Collect spillage.

[Storage]

- Store in a dry place. Keep container tightly closed in the locked place.

[Disposal]

- Dispose of contents / container to waste in accordance with local / regional / national / international regulations (to be specified).

<3. Composition/information on ingredients >

Distinction of chemical or mixture : mixture

Hazardous, harmful element :

Chemistry substance name	CAS No.	Content(%)	Note
Xylene	1330-20-7	23.0	PRTR 1 · 80
Ethyl benzene	100-41-4	17.0	PRTR 1 · 53
Isobutyl alcohol	78-83-1	1 ~ 5	
n-Butyl alcohol	71-36-3	1 ~ 5	
Ethylene glycol monobutyl ether	111-76-2	1 ~ 5	
Modified polyamide-amine	90722	40 ~ 50	

<4. First-aid measures >

Eye contact :

- Wash 15 minutes or more with plenty of clean water immediately. Wash completely to the reverse side of an eyelid.
- Receive the diagnosis of physician as soon as possible.

Skin contact :

- Wipe quickly clinging matter with clean cloth.
- Wash the affected area with plenty of running water using a mild soap or skin shampoo. Don't use solvents and thinner.
- Arrange medical treatment by a physician on injured skin and painful parts.

Inhalation :

- Remove the victim inhale solvent vapor and gasses in abundance to fresh air and keep in warm and quiet. If breathing is weak, irregular or has stopped, open his airway, loose his collar and belt and administer artificial respiration. Arrange medical treatment by a physician as soon as possible.
- Remove the victim inhale vapor and gasses of organic solvents and more to fresh air and keep quiet. Then, arrange medical care.

Ingestion :

- If swallow in the wrong, keep the victim quiet and arrange medical inspection by physician, immediately.
- Prevent to swallow the vomiting.
- Don't vomit things forcibly except dependence on the instruction of physician.

<5. Fire-fighting measures >

Extinction medicine : Powder, CO₂, Foams

Specific extinction method :

- Don't use water. • Use the specific extinguishing media.
- Fire-fighters should wear proper protective equipment's (Fire-proof wares etc.,)
- Remove inflammable materials near fire immediately.

- Cool the airtight container exposed to the high temperature sprinkling water.
- Do the extinction activity from the windward.

<6. Accidental release measures >

- Wear proper protective equipment's (Gloves, protective mask, apron and goggles)
- Take up and place in closed container and keep in safety zone.
- Ensure treatment of the contaminated and waste in compliance with government requirements.
- Absorb spill with inner materials (e.g. dry sand, earth) then place in a chemical waste containers. For large spills, dike for pollution further release.
- Shut off all source of ignition, heat, and inflammable materials immediately.
- Prepare proper fire-extinguisher for the fire.
- Take up the spill by equipment made of plastics to avoid sparks.
- Be careful not to be exhausted to the river etc. and be careful not to cause the influence on the environment.

<7. Handling and storage >

Handling :

- Use only in the well-ventilated areas.
- Keep container tightly and closely.
- Keep away from fire, spark and heat in using area.
- Equipment should be grounded and bonded. Use explosion proof electrical equipment.
- Use reduced-sparking hand-tools.
- Use the uniform and the work shoes of the electrification prevention type while working.
- Use adequate exhaust ventilation in closed area and wear proper protective equipment during using this materials.
- Wear a protection tool appropriate which touches eyes, the skins, mucous membranes, and clothes.
- Wash your the hand and face, etc. well after handling. Don't bring the pollution protection tool into the rest room.

Storage :

- Protect from direct sunlight. • Store in a cool dry, well-ventilated location.
- Keep away from fire and heat.

<8. Exposure controls/protection >

Exposure density of hazardous, harmful element :

Chemistry substance name	Management density	ACGIH (TLV)
Xylene	50 ppm	100 ppm
Ethyl benzene	—	100 ppm
Isobutyl alcohol	50 ppm	50 ppm
n-Butyl alcohol	25 ppm	25 ppm
Ethylene glycol monobutyl ether	25 ppm	20 ppm

Equipment requirement:

- Use non-spark closed type equipment.
- Prevent remaining vapors with adequate ventilation.
- Equipment should be grounded and bonded in case of transport, suction and stirring liquids.
- Don't use equipment having high temperature and source of fire around handling this materials.
- In poor ventilated area, use automatic spraying equipment and adequate ventilator to avoid direct workers' exposure to solvent vapors.
- In the closed area of tank, use ventilator effective to closed and bottom area.

Protection tool:

- Eye protection ; Wear protective goggles.
- Skin protection ; Wear impervious clothing such as gloves, apron and body suits.
- Respiratory protection ; Use a respiratory protection mask for organic solvent gasses.
Wear positive pressure self-contained breathing apparatus in closed area.
- Others ; Wear the energizing shoes when you paint static electricity.

<9. Physical and chemical properties >

Appearance:

- Form : Liquids • Color : Tan transparency
- Odor : Solvent odor

Specific temperatures/temperature ranges at which changes in physical sate occur :

- Boiling point ; 107.9 ~ 171.2 °C (Reference value)
- Autoignition temperature ; 244 °C (Reference value)
- Flashpoint ; 27 °C

Regulation of the use of organic solvents : Class 2 organic solvent.

Fire-fighting Law : Class 4 , No. 2 class petroleum.

<16. Other information >

The main quotation document:

- Japan Paint Manufacturers Association edit "The fifth edition of MSDS making guide book"
- Japan Paint Manufacturers Association edit "The fifth edition of material data base"
- Solvent pocket book

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