

MATERIAL SAFETY DATA SHEET

<1. Product and company identification >

Product Name BOUJINTEX #5000U HARDENER
 Reference No. 4732-0011
 Company MIZUTANI PAINT CO., LTD.
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 Section concerned Quality Assurance Dep.
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<2. Hazards identification >

[GHS classification]

Flammable liquids : Category 3

Acute toxicity (oral) : Category 5

Acute toxicity (skin) : Not classified

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 : Not classified

Skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Category 2

Reproductive toxicity : Category 1B

Specific target organ toxicity single exposure : Category 1 (Central nervous system, Respiratory system
 Kidney, Liver, General Toxicity)
 : Category 3 (Narcotic effects)

Specific target organ toxicity: repeated exposure : Category 1 (Nervous system, Central nervous system,
 Respiratory system, Kidney, Liver, Blood, General Toxicity)
 Category 2 (Spleen, Arterial system)

Aspiration hazard : Not applicable

Aquatic toxicity (acute) : Category 2

Aquatic toxicity (chronic) : Category 2

[GHS label elements including precautionary statements]



Signal word : DANGER

[Hazard statement]

- Flammable liquid and vapour.
- May be harmful if swallowed.
- May be harmful if inhaled.
- 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.
- Toxic 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.

[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	25.0	PRTR 1・80
Ethyl benzene	100-41-4	19.0	PRTR 1・53
Butyl acetate	123-86-4	10 ~ 20	
Ethyl acetate	141-78-6	1 ~ 5	

<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
Butyl acetate	150 ppm	150 ppm
Ethyl acetate	200 ppm	400 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 : Colorlessness
- Odor : Solvent odor

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

- Boiling point ; 126.3 ~ 144.4 °C (Reference value)
- Autoignition temperature ; 421 °C (Reference value)
- Flashpoint ; 28 °C
- Explosion properties ; Explosion limit upper bound 15.0 % (Reference value)
Explosion limit lower bound 1.1 % (Reference value)
- Vapor pressure : 1333 Pa(20 °C)(Reference value)
- Density ; 1.04 ~ 1.08 g/cm³
- Solubility ; It doesn't melt to water

<10. Stability and reactivity >

Stability:

- There is no problem in stability in preservation under the room temperature.

Hazardous polymerization reaction:

- The product unit is not polymerized. After BASE and HARDENER are mixed, if left to itself, the mixture gels.

Conditions to avoid:

- Don't heat the product. Pressure rises abnormally in the airtight container, and there are an explosion and dread of the ignition.

Hazardous decomposition products;

- CO and a harmful gas such as NO_x might be generated by combustion etc.

<11. Toxicological information >

Acute toxicity (oral) : Category 5

Acute toxicity (inhalation: vapour) : Category 5

Skin corrosion / irritation : Category 2

Serious eye damages / eye irritation : Category 2

Carcinogenicity : Category 2

Reproductive toxicity : Category 1A

Specific target organ toxicity single exposure : Category 1 (Central nervous system, Respiratory system
Kidney, Liver, Blood, Spleen)
: Category 3 (Narcotic effects)Specific target organ toxicity: repeated exposure : Category 1 (Nervous system, Central nervous system,
Respiratory system, Kidney, Liver, Blood, General Toxicity)

<12. Ecological information >

- Note the handling of the leakage thing and waste because it might influence the environment.
- Deal so that neither the product nor the washing water may flow directly to ground, the river, and the drain ditch.
- Information is not possessed about decomposition, accumulation, and the fish toxicity of the product.

<13. Disposal considerations >

- Waste paints and opened containers should be asked to dispose with licensed industrial waste treatment company.
- Don't wash away the water used for cleaning of vessels and equipment into shower or water way.
- The wastes producing from process of water refining and of incineration should be disposed of in accordance with governmental laws and environmental control regulations or asked of dispose with licensed special company.

<14. Transport information >

General :

- Transport and store according to general caution and instructions in before mentioned comment.
- Load the product for the fall and no damage after it is confirmed that there is no leakage in the container.
- Do the collapse of cargo piles prevention surely.

Land transportation :

- Transport this product in compliance with the Fire-fighting Law, Law of Industrial Safety & Hygiene and Poisonous & Deleterious Material Control Law, if any.

Maritime transportation :

- Maritime transportation should be in compliance with 「SENPAKU-ANZEN-HOU」

Air transportation :

- Air transportation should be in compliance with the Aviation Act.

U.N. Number : Class 3 (Inflammable liquids), 1263

<15. Regulatory information >

Law of pollutant release and transfer register.

Law of Industrial Safety and Hygiene : Inflammable Liquid.

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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