

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Shine Binder B-1006
General Use: May be used for printing on paper, textile, wood, and film.
Product Description: Water based binder of resin.
MSDS Number: US-0124

MANUFACTURER

Company Name: Matsui Shikiso Chemical Co., Ltd.
Address: 64 Kamikazansakuradani-cho, Yamashina-ku, Kyoto 607-8466, JAPAN
Telephone No.: +81 (75) 594-5612

AGENCY

Matsui International Co., Inc.
Address: 1501 West 178th Street, Gardena, CA 90248, U.S.A.
Telephone No.: (310) 767-7812

EMERGENCY TELEPHONE NUMBER: +81 (75) 594-5612 / (310) 767-7812

2. COMPOSITION/INFORMATION ON INGREDIENTS

| No | Component(s) | CAS # | Approx. % |
|----|---|--------------|-----------|
| A | Resin | Trade secret | 35 |
| B | Ethylene glycol | 107-21-1 | 3 |
| C | Caprolactam | 105-60-2 | 3 |
| D | Non-hazardous and other ingredients below reportable levels | N/A | Balance |

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200):

This product is not considered to be hazardous under OSHA's Hazard Communication Standard.

3. HAZARDS IDENTIFICATION

HMIS Ratings

Health: 1
Flammability: 0
Reactivity: 0
Protection: C

(0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe)

EMERGENCY OVERVIEW:

May cause respiratory tract, skin, and eye irritation.

POTENTIAL HEALTH EFFECTS

Inhalation:

Product may cause irritation.

Eye: Product may cause irritation.

Skin: Prolonged contact with skin or on people with sensitive skin may cause skin rash or inflammation.

Ingestion:

May cause discomfort in the stomach and pharynx.

Chronic:

Not available.

Carcinogenicity:

NTP: Not listed.
OSHA: Not regulated.
IARC: Not listed.
ACGIH: Not listed.

POTENTIAL ENVIRONMENTAL EFFECTS:

Not available.

4. FIRST AID MEASURES

INHALATION:

If inhale a large quantity, remove to fresh air and lie quiet. Seek medical attention as needed.

EYE: Immediately flush eyes with water for at least 15 minutes. Seek medical attention as needed.

SKIN: Wash with mild soap and water.

INGESTION:

Rinse mouth thoroughly with water. Induce vomiting if possible. Seek medical attention as needed.

PROTECTION TO FIRST-AIDERS:

Wear personal protective clothing and equipment.

NOTE TO PHYSICIAN:

Treat symptomatically.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

| | |
|--------------------------------|-------------------------------------|
| Hazardous Combustion Products: | Not available. |
| Flash Point: | Not available. |
| Lower Flammable Limit: | Not available. |
| Upper Flammable Limit: | Not available. |
| Autoignition: | Not available. |
| Conditions of Flammability: | Requires this product be dry. |
| Explosion Data | |
| Impact Sensitivity: | Not sensitive to mechanical impact. |
| Static Discharge: | Not sensitive to static discharge. |

EXTINGUISHING MEDIA:

Use water, dry chemical, or CO₂ gas.

(This product is not combustible under normal conditions due to its aqueous property.)

FIRE FIGHTING INSTRUCTIONS:

In case of fire, wear respirator.

6. ACCIDENTAL RELEASE MEASURES

LAND SPILL:

Wear suitable personal protective equipment as needed.

For small spill, absorb with dry sand, saw dust or rag, and collect into container for disposal.

Wipe the remaining up with rag.

For large spill, dike with soil, blankets or sandbags to prevent from contaminating soil and collect into container with shovel or vacuum.

WATER SPILL:

Wear suitable personal protective equipment as needed. Avoid releasing spilled material into rivers and/or lakes. If material is released to public water, advice local authority.

7. HANDLING AND STORAGE

HANDLING:

Wear suitable protective equipment and clothing as needed to prevent the material from contacting skin and eyes. Use only in well-ventilated area.

STORAGE:

Store in a cool and dark place away from direct sunlight. Avoid freezing. Keep container tightly closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMIT VALUES:

| | | |
|-----------------|--------------------|--|
| Ethylene glycol | ACGIH – TLV (STEL) | 100 mg/m ³ (as ceiling limit) |
| Caprolactam | ACGIH – TLV (TWA) | 5 mg/m ³ |

EXPOSURE CONTROLS

Occupational Exposure Controls

Engineering Controls:

Local exhaust ventilation or general ventilation is recommended during indoor operation.

Personal Protection

Respiratory Protection:

Not necessary under normal handling condition.

Hand Protection:

Wear rubber or plastic gloves.

Eye Protection:

Wear safety glasses or goggles.

Skin Protection:

Wear long pants, long sleeves, and boots when applicable.

Environmental Exposure Controls:

Not available.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|--|
| Appearance: | Milky white paste. |
| Odor: | Slight odor. |
| pH: | 8.0 ± 0.5 |
| Boiling Point: | Not available. |
| Melting Point: | Not available. |
| Decomposition Temperature: | Not available. |
| Flash Point: | Not available. |
| Auto-Ignition Temperature: | Not available. |
| Flammability: | If this product is dry, it may be flammable. |
| Explosive Properties: | Not applicable. |
| Oxidizing Properties: | Not applicable. |
| Vapor Pressure: | Not available. |
| Specific Gravity (water = 1): | 1.00 ± 0.05 |
| Solubility | |
| Water: | Miscible. |
| Partition Coefficient (n-octanol/water): | Not available. |
| Viscosity: | Not available. |
| Vapor Density: | Not available. |
| Evaporation Rate: | Not available. |

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: None.
STABILITY: Stable under recommended conditions of storage and handling.
MATERIALS TO AVOID: None.
HAZARDOUS REACTIONS/DECOMPOSITION PRODUCTS:
None.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: Not available.
Eye Irritation: Not available.
Skin Irritation: Not available.
Sensitization: Not available.
Repeated Dose Toxicity: Not available.
Chronic Toxicity: Not available.
Mutagenicity: Not available.
Carcinogenicity: Not applicable.
Reproductive and Developmental Toxicity:
Not available.

12. ECOLOGICAL INFORMATION

ECOTOXICITY: Not available.
MOBILITY: Not available.
PERSISTENCE AND BIODEGRADABILITY:
Not available.
BIOACCUMULATIVE POTENTIAL: Not available.
OTHER ADVERSE EFFECTS: Not available.

13. DISPOSAL INFORMATION

Comply with all federal, state and local regulations.
Do not dump this product into sewers, on the ground or into any body of water.

14. TRANSPORT INFORMATION

US DEPARTMENT OF TRANSPORTATION (DOT)

Hazardous Materials: Not applicable.
Hazardous Materials Description and Proper Shipping Name:
Not applicable.
Hazard Class or Division: Not applicable.
Identification Number: Not applicable.
Packing Group: Not applicable.
Label(s) Required: Not applicable.

SEA TRANSPORT

IMDG

Class: Not applicable.
Packing Group (PG): Not applicable.
UN Number: Not applicable.
Proper Shipping Name: Not applicable.
Marine Pollutant: Not applicable.

AIR TRANSPORT

ICAO/IATA

Class: Not applicable.
Packing Group (PG): Not applicable.
UN Number: Not applicable.
Proper Shipping Name: Not applicable.

15. REGULATORY INFORMATION

OSHA STATUS:

This product is not considered to be hazardous under 29 CFR 1910.1200.

TSCA STATUS:

All components on TSCA INVENTORY.

CERCLA REPORTABLE QUANTITY (40 CFR 117, 302):

Not applicable.

SARA TITLE III

Section 302 (40 CFR 355) – Extremely hazardous substance:

Not applicable.

Section 311/312 (40 CFR 370) – Hazard categories:

| | |
|---------------------------------|---|
| Immediate (acute) health hazard | N |
| Delayed (chronic) health hazard | N |
| Fire hazard | N |
| Sudden release of pressure | N |
| Reactive | N |

Section 313 (40 CFR 372) – Toxic chemical:

Ethylene glycol

CONEG – Typical Metals present in ppm:

| | |
|------------------------------|---|
| Cadmium (Cd) | N |
| Hexavalent Chromium (Cr(VI)) | N |
| Lead (Pb) | N |
| Mercury (Hg) | N |

ENCS (Japan): Components listed.

Please refer to any other federal, state and local regulations.

For specific questions please call to Matsui International Co., Inc. USA 3107677812.

16. OTHER

ABBREVIATIONS

OSHA: The Occupational Safety and Health Administration
NTP: National Toxicology Program
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Governmental Industrial Hygienists, Inc.
IMDG: International Maritime Dangerous Goods
ICAO: International Civil Aviation Organization
IATA: International Air Transport Association
TSCA: Toxic Substances Control Act
CERCLA: Comprehensive Environmental Response, Compensation and Liability Act of 1980
SARA: Superfund Amendments and Reauthorization Act of 1986
CONEG: the Coalition of Northeastern Governors
ENCS: Existing and New Chemical Substances

New and updated MSDS are presented in the ANSI Z400.1-1998 Sixteen-section format. All available information is included in systematic update.

This information is furnished without warranty, express or implied, except that it is accurate to the best knowledge of MATSUI SHIKISO CHEMICAL CO., LTD. It relates only to the specific product designated herein, and does not relate to use in combination with any other material or in any process. MATSUI SHIKISO CHEMICAL CO., LTD. assumes no legal responsibility for use of or reliance upon this information.