

**MATERIAL SAFETY DATA SHEET**

SMP Technologies Inc.  
Room 301 Ebisu First Place  
1-22-8, Ebisu, Shibuya-ku  
Tokyo, 150-0013 Japan

Emergency Phone:81-3-5798-7499

MM-2520,MM-3520,MM-3520S,MM-4020,MM-4520, MM-5520,MM-6020,MM-6520,  
MM-7520,MM-9020,MM-12020

**POLYURETHANE COMPOUND**

Issue Date : January 15, 2001

MSDS : DPX-B025 Page 1

**INGREDIENTS:** (% w/w unless otherwise indicated)

>98%	Polyurethane resin from: Diphenylmethane-4,4'-diisocyanate (CAS 101-68-8) Adipic acid (CAS 124-04-9) Ethylene glycol (CAS 107-21-1) Ethylene oxide (CAS 75-21-8) Polypropylene oxide (CAS 75-56-9) 1,4-Butanediol (CAS 110-63-4) Bisphenol A (CAS-80-05-7)
> 2%	Additives

**PHYSICAL DATA:**

BOILING POINT:	Not Applicable
VAPOR PRESSURE:	Not Applicable
SOLUBILITY IN WATER:	Insoluble
SPECIFIC GRAVITY:	1.13 - 1.25
APPEARANCE:	White pellets or white flakes
ODOR:	Odorless

**FIRE AND EXPLOSION HAZARDS:**

FLASH POINT:	Not Applicable
FLAMMABLE LIMITS:	Not Applicable

Quantities of dust in air, such as may be produced in sanding or sawing or Sawing operations after molding, may be combustible.

EXTINGUISHING MEDIA: Water fog, foam, CO<sub>2</sub>, dry chemical, sand

**FIRE-FIGHTING PROCEDURE:**

Toxic decomposition products may be produced under fire conditions, use a self – contained breathing apparatus to prevent inhalation of these fumes.

---

**MATERIAL SAFETY DATA SHEET**

---

SMP Technologies Inc.  
Room 301 Ebisu First Place  
1-22-8, Ebisu, Shibuya-ku  
Tokyo 150-0013 Japan

Emergency Phone:81-3-5798-7499

SMP MM-2520, MM-3520, MM-4020, MM-4520, MM-5520,MM-6020,MM-6520,  
MM-7520, MM-9020, MM-12020  
POLYURETHANE COMPOUND

Issue Date : January 15, 2001

MSDS : DPX-B025 Page 2

---

CHEMICAL REACTIVITY:

**STABILITY (CONDITION TO AVOID):**

Avoid temperatures above 570F (300C). Hazardous decomposition products may be released from decomposing resin.

**INCOMPATIBILITY (MATERIALS TO AVOID):**

None known

**HAZARDOUS DECOMPOSITION PRODUCTS:**

Decomposition products at very high temperatures, such as in fire, include carbon monoxide, carbon dioxide, and small amounts of hydrogen cyanide.

**HAZARDOUS POLYMERIZATION:**

Not applicable.

HEALTH HAZARDS:

**INGESTION:**

The single dose oral toxicity is not known, but it is believed to be very low. No hazards are anticipated from the accidental ingestion of small amounts such as may be incidental to proper handling.

**INHALATION:**

Dust may be irritating to the upper respiratory tract.  
Vapors which may be released at normal processing temperatures may be irritating to the upper respiratory tract, especially after repeating exposure. Adequate ventilation should be provided.

**SKIN ABSORPTION:**

No significant skin absorption hazard is expected due to the material's physical properties.

**EYE CONTACT:**

The mechanical action of pellets or dust may cause irritation or corneal injury. Processing vapors may irritate the eyes.

---

## MATERIAL SAFETY DATA SHEET

---

SMP Technologies Inc.  
Room 301 Ebisu First Place  
1-22-8, Ebisu, Shibuya-ku  
Tokyo 150-0013 Japan

Emergency Phone:81-3-5798-7499

SMP MM-2520, MM-3520, MM-4020, MM-4520, MM-5520,MM-6020,MM-6520,  
MM-7520, MM-9020, MM-12020  
POLYURETHANE COMPOUND

Issue Date : January 15, 2001

MSDS : DPX-B025 Page 3

---

### FIRST AID PROCEDURES:

#### EYES:

Irrigate immediately with water for at least five minutes.  
Damage is expected only from mechanical effects.

#### SKIN:

Wash off with flowing water as in a shower.

#### INHALATION:

If effects occur, move to fresh air and consult a physician.

#### INGESTION:

No adverse effects are expected via this route of exposure under conditions of proper handling.

### PRECAUTIONS IN HANDLING:

#### STORAGE:

Store in sealed containers and protect from atmospheric moisture.  
Store in an area which is cool and dark.

#### SPILLS:

Pellets may cause slipping hazard. Sweep up or vacuum up into a closed container for disposal or reuse.

#### DISPOSAL:

Incinerate or dispose of in a landfill as may be applicable under federal, state, and local regulations.

---

**MATERIAL SAFETY DATA SHEET**

---

SMP Technologies Inc.  
Room 301 Ebisu First Place  
1-22-8, Ebisu, Shibuya-ku  
Tokyo 150-0013 Japan

Emergency Phone:81-3-5798-7499

SMP MM-2520, MM-3520, MM-4020, MM-4520, MM-5520,MM-6020,MM-6520,  
MM-7520, MM-9020, MM-12020  
POLYURETHANE COMPOUND

Issue Date : January 15, 2001

MSDS : DPX-B025 Page 4

---

PRECAUTIONS IN USE:

**VENTILATION:**

Provide adequate ventilation. Fumes released during normal processing may cause eye and upper respiratory irritation. Good general-area ventilation is usually sufficient for molding operations so that no respiratory protection is needed. If ventilation is inadequate, an approved airpurifying full-face respirator should be used. Typical processing temperatures range from 325-465F (160-240C). Molten material may cause thermal burns.

Avoid skin contact with molten materials.

Heating the material above 570F (300C) may create hazardous decomposition products. Do not overheat.

Effective local exhaust should be used for any operation which produces dust. Quantities of dust in the air may be combustible and may irritate the eyes and respiratory tract. If local exhaust is insufficient, an approved dust respirator should be used.

**SKIN PROTECTION:**

Clean clothing covering the body should be sufficient.

**EYE PROTECTION:**

Safety glasses should be adequate for most operations, however chemical goggles are recommended for operations which generate dust.

**PERSONAL HYGIENE:**

Wash hands and face with soap and water to remove dust before eating or smoking.

ADDITIONAL INFORMATION:

**SARA HAZARD CATEGORY:**

These products are considered not to meet any hazard category as described in "Hazard Categories" under Sections 311 and 312 of the EPA Superfund Amendment and Reauthorization Act of 1986 (SARA Title 302).