

1100FS
 BOSTIK INC.
 MSDS ID: 1100FS

SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS NUMBER: 1100FS
 PRODUCT NAME: 1100 FS (all Colors)
 CHEMICAL FAMILY: Polyurethane adhesive/sealant
 COMPANY: Bostik Inc.
 211 Boston St.
 Middleton, MA 01949

EMERGENCY RESPONSE NUMBERS:
 Transportation:
 In case of emergency, Call:
 800-227-0332
 Product Safety and Environmental:
 978-777-0100



SECTION 2— INGREDIENT AND EXPOSURE LIMIT INFORMATION

COMPONENT*	CAS NUMBER	WT PERCENT**	OEL ***	OSHA PEL
4,4'-DIPHENYLMETHANE DI ISOCYANATE	101-68-8	.1 to 1%	0.005 ppm	Not Listed
ETHYL BENZENE	100-41-4	1 to 5%	100 ppm	Not Listed
ISOPHORONE DIISOCYANATE	4098-71-9	.1 to 1%	0.005 ppm	Not Listed
XYLENE	1330-20-7	5 to 10 %	100 ppm	Not Listed

* This List represents a composite of available 100FS formulations.

** If the total percentage is less than 100, the balance of this product is not considered hazardous as defined under OSHA's Hazard Communication Standard (29 CFR 1910.1200).

*** The Bostik recommended Occupational Exposure Limit (OEL) value represents the lower of the US OSHA PEL, ACGIH TLV, or Manufacturer's Recommended Limit.

N/A = Not Available, N/D = Not Determined

SECTION 3 — HAZARDS IDENTIFICATION

POTENTIAL HEALTH CONSIDERATIONS

HMIS HAZARD RATING

Health: 2
 Flammability: 2
 Reactivity: 0
 Protection: G

Note: Numeric Hazard Ratings are intended only to indicate the relative hazard of the product. Users must read and understand the entire Material Safety Data Sheet prior to use of this product.

CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) CLASS –

Class B3 — Combustible Liquid
 D2B- Other Toxic Effects, Skin and Eye Irritant
 D2B- Other Toxic Effects, Skin Sensitization

LIKELY ROUTES OF ENTRY

Contact, Inhalation

TARGET ORGANS

Lungs, Skin, Eyes,

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SECTION 3— HAZARDS IDENTIFICATION (Cont.)

POTENTIAL IMMEDIATE EFFECTS FROM OVEREXPOSURE**CONTACT, SKIN and EYE**

Ingredient causes skin and eye irritation, causing a rash or reddening on contact. May cause allergic skin reaction, skin sensitization and/or dermatitis.

SKIN ABSORPTION

Ingredient is readily absorbed through skin leading to potential systemic effects such as dizziness or headaches.

INHALATION

Hazardous if inhaled. Inhalation may lead to systemic and local effects such as irritation of throat and mucous membranes, dizziness, headaches.

INGESTION

Toxic when ingested. Causes gastrointestinal discomfort and vomiting.

SYMPTOMS OF OVEREXPOSURE

Irritation, headache, dizziness, giddiness, lightheadedness, drowsiness, lethargy, breathing difficulty, chest pain, coughing, dry skin, abdominal pain, cramps, nausea, vomiting.

POTENTIAL LONG-TERM EFFECTS FROM OVEREXPOSURE:**CANCER INFORMATION**

None of the ingredients in this product exceeding 0.1% are on the IARC, NTP, or OSHA lists of carcinogenic hazards.

CHRONIC EFFECTS

Long-term overexposure to the hazardous materials in this product may lead to headaches, loss of appetite, memory and concentration problems, low blood cell count, eye damage, nausea, liver and kidney damage, dryness and cracking of skin and sensitization. Some solvents have been shown to cause hazardous reproductive effects.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Asthma, dermatitis, and liver or kidney diseases. Previously sensitized individuals may have an allergic reaction.

NOTES TO MD AND OTHER HEALTH RELATED INFORMATION

If overexposure to the hazardous materials in this product is suspected, testing should include nervous system and brain effects including recent memory, mood, concentration, headaches and altered sleep patterns. Liver and kidney function should be evaluated. A complete blood count may be advisable.

SECTION 4 - FIRST AID MEASURES

CONTACT, SKIN AND EYE

EYES: IMMEDIATELY flush eyes with large amounts of water for at least 15 minutes, occasionally lifting upper and lower lids. Seek medical attention.

SKIN: Quickly remove contaminated clothing. Immediately wash contaminated skin with large amounts of soap and water. Seek medical attention. If irritation or rash or other symptoms develop.

INHALATION

Remove victim to fresh air. Begin rescue breathing if breathing has stopped. Transfer to a medical facility.

INGESTION

DO NOT INDUCE VOMITING. IMMEDIATELY call a hospital or poison control center. If the victim is conscious and not convulsing, give 1 or 2 glasses of water to dilute the chemical. If the victim is convulsing or unconscious **DO NOT** give anything by mouth, ensure that the victim's airway is open and lay victim on his/her side with the head lower than the body. Seek medical attention.

SECTION 5 - FIRE FIGHTING MEASURES

FLAMMABILITY DATA

FLASH POINT	DEG F:	126	DEG C:	52
LOWER EXPLOSIVE LIMIT %:		1.0		
UPPER EXPLOSIVE LIMIT %:		7.0		
AUTOIGNITION POINT	DEG F:	924	DEG C:	496

FIRE AND EXPLOSION HAZARDS:

This product is classified as a COMBUSTIBLE LIQUID. Containers may explode in a fire. Toxic gases may be produced in a fire.

DUST EXPLOSION HAZARD:

This product does not present a dust explosion hazard under known conditions of use.

SENSITIVITY TO MECHANICAL IMPACT:

This product does not present a mechanical impact hazard under known conditions of use.

SENSITIVITY TO STATIC DISCHARGE:

This product does not present a static discharge hazard under known conditions of use.

EXTINGUISHING MEDIA:

Use water spray, foam, dry chemical or carbon dioxide.

HAZARDOUS COMBUSTION PRODUCTS:

Hazardous gases produced in a fire may include oxides of nitrogen and carbon and hydrogen cyanide.

SECTION 6 - ACCIDENTAL RELEASE MEASURE

SPILL CLEAN-UP PROCEDURES - Scrape up polyurethane and deposit into sealed containers.

HEALTH CONSIDERATIONS AND PROTECTIVE EQUIPMENT

Follow the guidelines of 29CFR 1910.120 for dealing with a spill of any size. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill, including the material spilled, the quantity of the spill and the area in which the spill occurred. Never exceed any occupational exposure limits and consider that the evaporation of volatile solvents can lead to the displacement of air creating an environment that can cause asphyxiation.

SECTION 7 - HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS - This product is COMBUSTIBLE. Store in a cool, dry area out of direct sunlight. Store away from all sources of ignition. Use only in well ventilated areas.

SECTION 8- EXPOSURE CONTROLS AND PERSONAL PROTECTION

VENTILATION CONTROLS - Ventilation must maintain vapors below the PEL/TLV exposure limits. Local exhaust is preferred, but general ventilation may be acceptable to meet exposure limits.

RESPIRATORY PROTECTION - Not normally required. However, where the potential exists to exceed the PEL or TLV, use a MSHA/NIOSH approved full faceplate respirator with an organic vapor cartridge/canister. Increased protection is provided by full face piece powered air purifying respirators.

EYE PROTECTION - Safety glasses are recommended.

SKIN PROTECTION - Avoid skin contact. Wear chemical resistant gloves and clothing. Safety equipment suppliers/manufacturers can provide recommendations on the most protective glove/clothing material for your operation.

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SECTION 9— PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: A thick, colored paste with a mild solvent odor.
 SPECIFIC GRAVITY: 1.20 (WATER = 1)
 DENSITY: 9.98 lb/gal
 SOLUBILITY IN WATER: 0.0%
 PERCENT VOLATILE (WEIGHT): 9.8
 VOLATILE ORGANIC COMPOUND: 117g/l (0.98 lb/gl)
 VAPOR PRESSURE: 5.1
 pH: N/A
 BOILING POINT: N/D
 VAPOR DENSITY: 3.7
 EVAPORATION RATE: N/D
 FREEZING POINT: N/D
 ODOR THRESHOLD: N/D
 OCTANOL/WATER COEFFICIENT: N/D

SECTION 10 - STABILITY AND REACTIVITY

STABILITY

Product is stable under normal temperature and pressure.

HAZARDOUS POLYMERIZATION

Can occur if exposed to moisture or other isocyanate reactants.

CONDITIONS TO AVOID

Avoid contact with Strong Oxidizers, Strong Alkalis, Strong Acids, Alcohols, Water.

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE (SHORT TERM) TOXICITY

Component	LD50, Oral LD50,	Dermal	LC50, Inhalation
MDI	>10g/kg, mouse	N/A	178 mg/M3, rat
ETHYL BENZENE	3500-Mg/Kg,Rat	17.8 g/kg, rabbit	>4000 ppm/4H, rat
IPDI	N/A	1060 mg/kg, rat	260 mg/m3, rat
XYLENE	4300 mg/kg, rat	N/A	5000 ppm, rat

CHRONIC (LONG TERM) TOXICITY AND OTHER INFORMATION

Chronic exposure can cause reproductive problems, reduced fertility, low blood cell count, drying and cracking of skin, headache, loss of appetite, nausea, liver and kidney damage, sensitization, asthma and reduced lung function and possible central nervous system damage.

SECTION 12 - ECOLOGICAL INFORMATION

Organic solvents produce slight to moderate toxicity to aquatic life. Insufficient data exists to evaluate the effect on plants, birds or land animals.

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SECTION 13— DISPOSAL CONSIDERATIONS

Dispose of in accordance with all Federal, State, and Local rules. Be aware that State and Local requirements may differ widely depending on location and may in many cases be different from Federal rules.

SECTION 14 - TRANSPORT INFORMATION

DOT/IATA/IMDG/TDG PROPER SHIPPING NAME - Not regulated as a hazardous material.

SECTION 15— REGULATORY INFORMATION

SARA TITLE III - THE FOLLOWING COMPONENTS ARE LISTED UNDER SECTION 313:

CAS NUMBER	CHEMICAL NAME
100-41-4	ETHYLBENZENE
1330-20-7	XYLENE (MIXED ISOMERS)

CALIFORNIA PROPOSITION 65 –

CHEMICALS SHOWN BELOW WHICH ARE NOT LISTED IN SECTION II ARE PRESENT AT TRACE LEVELS BELOW THOSE CONSIDERED HAZARDOUS BY OSHA.

CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER:

CAS NUMBER	CHEMICAL NAME
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No Components Listed.

CHEMICALS KNOWN TO THE STATE OF CALIFORNIA AS DEVELOPMENTAL HAZARDS:

No Components Listed.

CHEMICALS KNOWN TO THE STATE OF CALIFORNIA AS MALE REPRODUCTIVE HAZARDS:

No Components Listed.

CHEMICALS KNOWN TO THE STATE OF CALIFORNIA AS FEMALE REPRODUCTIVE HAZARDS:

No Components Listed.

TOXIC SUBSTANCE CONTROL ACT (TSCA) INVENTORY STATUS - All the components of this product are either listed on the TSCA Chemical Substance Inventory or are exempted from listing.

CANADIAN DOMESTIC SUBSTANCE LIST STATUS - All components of this product are listed in either the Canadian Domestic Substances List (DSL) or Non-domestic Substances List (NDSL).

EUROPEAN UNION EINECS LIST STATUS-

All components of this product are listed on the EINECS Inventory, or exempt from listing under the Polymer Exemption Provision.

SECTION 16— OTHER INFORMATION

PREPARED BY: Michael S. Fine

IMPORTANT NOTICE: All statements, technical information and recommendations set forth herein are based on information or tests which BOSTIK believes to be reliable. However, BOSTIK cannot guarantee their accuracy or completeness. The buyer should conduct his own tests of this product before use to determine proper preparation technique and suitability for the proposed application. BOSTIK's sale of this product is limited to the terms and conditions set forth on BOSTIK's order acknowledgement.

To summarize, BOSTIK's only warranty is that the product conforms with its written specifications, and is free from defects under normal usage; and BOSTIK's only obligation for non-compliance with this warranty is to replace the product or refund the buyer's purchase price. BOSTIK DISCLAIMS THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. In no case will BOSTIK be liable for direct, consequential, economic or other damage except for the replacement or refund as set forth above.

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