# Bostir

# MATERIAL SAFETY DATA SHEET

# 1. Product and Company Identification

**Product name GPS1 Sealant Series** 

GPS1 Sealant Series - Various Colors **MSDS** name Product name(s) covered See Section 16 for Product Names Covered.

CAS# Mixture

Polyurethane Sealant/Adhesive Product use

**Generic description** Polyurethane Sealant

**Manufacturer** Bostik, Inc.

211 Boston Street

Middleton, MA 01949 USA

24 hour emergency

assistance

Telephone: 1-800-227-0332

**General assistance** Telephone: 1-978-777-0100 **MSDS** assistance Telephone: 1-414-607-1347

#### 2. Hazards Identification

**Emergency overview** This product is irritating to the eyes and skin. Thermal decomposition/burning may produce

toxic gases and fumes. Closed containers may rupture when exposed to high temperatures, or

when the product has been contaminated with water.

Avoid breathing hot mists and vapors. This product contains a respiratory and skin sensitizer. Causes respiratory tract irritation and may cause allergic respiratory reaction. May cause permanent respiratory damage. Product vapors are potentially irritating to skin. May cause

allergic skin reaction and dermatitis.

**Potential health effects** 

Signs and symptoms

This product may cause irritation to the eyes. May cause temporary corneal injury. **Eyes** 

Skin Skin contact may cause irritation. Isocyanates may react with skin protein and moisture to

cause itching, reddening, swelling, scaling or blistering. Individuals previously sensitized to this material may experience these symptoms from exposure to very small amounts of liquid or

vapor.

**Inhalation** Single large does, and/or repeated exposures, may lead to sensitization to diisocyanates or

polyisocyanates (asthma or asthma-like symptoms), causing an individual to experience adverse effects at exposure levels well below exposure limits or quidelines. Symptoms may include chest tightness, wheezing, shortness of breath, coughing or asthmatic attack, and may be delayed up to several hours. Extreme asthmatic reactions can be life threatening. Once sensitized, an individual may experience adverse symptoms upon exposure to dust, cold air or other irritants. Sensitization can last several months, years or be permanent in some cases.

**Ingestion** May cause irritation and corrosive action in the mouth, throat and digestive tract.

**Target organs** The lungs and skin may be targeted and damaged by components of this product.

> Signs and symptoms of overexposure to this product include headache, irritation of upper respiratory tract, asthmatic symptoms, chest tightness, breathing difficulty, coughing, sore

throat, eye irritation, skin irritation and/or diarrhea.

**Hazard statements** This product contains Methylene Diphenyl Isocyanate (MDI) which is a potential skin sensitizer

and has been shown to alter cells in certain experiments. Although inconclusive, these cellular changes are thought to indicate potential carcinogenicity. Risk to your health depends on

duration and concentration of exposure.

# 3. Composition / Information on Ingredients

Hazardous components	CAS #	Percent
Xylenes (o-, m-, p- isomers)	1330-20-7	1 - 5
Methylene Diphenyl Isocyanate (MDI)	101-68-8	0.1 - 1
Phenylethane	100-41-4	0.1 - 1

Material name: GPS1 Sealant Series MSDS US 1/5

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#### 4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention or

advice.

Skin contact Remove contaminated clothing to prevent further skin exposure and dispose of properly. In

situations involving considerable skin contact, place the contaminated person in a deluge shower for at least 15 minutes. For minor exposures, wash thoroughly with soap and clean

water. Get medical attention if irritation persists.

Inhalation Remove to fresh air. Get medical attention immediately for a large dose exposure or if cough

or other symptoms develop. Administer oxygen or artificial respiration as needed.

**Ingestion** If ingested, get immediate medical attention. Do not induce vomiting unless instructed to do so

by medical personnel. Never give anything by mouth to a victim who is unconscious or is

having convulsions.

Notes to physician Treat symptomatically and supportively. Contact Bostik to determine whether any additiona

information is available.

Eves: Stain for evidence of corneal injury. If cornea is burned, apply antibiotic/steroid

preparation as needed.

Skin: This product contains a skin sensitizer. Treat symptomatically as for contact dermatitis or

thermal burn.

Ingestion: Treat symptomatically.

Inhalation: This material contains a known pulmonary sensitizer.

Any individual experiencing dermal or pulmonary sensitization should be removed from exposure to any diisocyanate. May aggravate existing heart conditions, particularly those with abnormal heart rhythms. If overexposure to the solvents 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. This material, if aspirated into the lungs, may cause chemical pneumonitis; treat the

affected person appropriately.

# 5. Fire Fighting Measures

**Hazardous combustion** 

products

Additional decomposition products include oxides of nitrogen, amines, hydrogen cyanide and isocyanate-containing compounds.

Extinguishing media

Suitable extinguishing

media

Use dry chemical, carbon dioxide, or foam. Water spray (fog).

Fire fighting

equipment/instructions

Firefighters should wear NFPA compliant structural fire fighting protective equipment, including a self-contained breathing apparatus, helmet, hood, boots and gloves. Avoid contact with isocyanates. During a fire, isocyanate vapors and other irritating and highly toxic gases may be

produced. None Known

**Dust explosion hazard** Sensitivity to static discharge Flash point

None Known 166 °F (74.4 °C)

#### 6. Accidental Release Measures

**Emergency action** Appropriate safety measures and protective equipment should be used. See Section 8. Do not

discharge to lakes, streams, ponds, or sewers. Dispose of in compliance with local, state, and

federal regulations.

Spill or leak procedure

**Containment procedures** 

Place into appropriate containers for disposal. Thoroughly clean area where spill occurred. Isolate spill area. Stop discharge if safe to do so. Stop material from contaminating soil or from

entering sewers or water streams.

See Federal reporting requirements listed in Section 15. We recommend you contact local Reporting

authorities to determine if there may be other local reporting requirements.

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## 7. Handling and Storage

Handling Wash hands thoroughly after handling, especially before eating, drinking, smoking, and using

> restroom facilities. Wash contaminated goggles, face shields, and gloves. Professionally launder contaminated clothing before re-use. Do not breathe vapors, mists or dusts. Do not breathe fumes generated when the material is overheated or burned. Use adequate ventilation. Wear respiratory protection if the material is heated, sprayed, used in a confined space or if exposure limit is exceeded. This product can produce asthmatic sensitization. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must avoid fumes from this product. Wear appropriate protective equipment to avoid contact with skin and eyes.

Store in a cool, dry, well-ventilated area away from heat, ignition sources and direct sunlight. Storage

Water contamination should be avoided. Cool location should be 60-80 degrees F or 15-30

degrees C.

**Empty container precaution** Attention! Follow label warnings even after container is emptied since empty containers may

> retain product residues. Do not reuse empty container without professional cleaning for food, clothing, or products for human or animal consumption, or where skin contact can occur.

# 8. Exposure Controls / Personal Protection

**Engineering controls** Use local exhaust or general ventilation where the potential exists to exceed the PEL or TLV

exposure limits.

Personal protective equipment

Eye protection Wear goggles or safety glasses with side shields.

Skin and body protection Wear appropriate clothing to minimize skin contact with this product.

**Respiratory protection** Avoid breathing vapor and/or mists. If airborne concentrations are above the applicable

> exposure limits, use NIOSH approved respiratory protection. High airborne concentrations may necessitate the use of self-contained breathing apparatus (SCBA) or a supplied air respirator.

General Eyewash fountains and emergency showers should be readily available.

Additional exposure data

US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3 & ppm

Phenylethane 100-41-4 ETHYL BENZENE 100 PPM

METHYLENE BISPHENYL ISOCYANATE (MDI) 0.005 PPM Methylene Diphenyl Isocyanate 101-68-8

(MDI)

Xylenes (o-, m-, p- isomers) 1330-20-7 XYLENE (O, M AND P ISOMERS) 100 PPM

US NIOSH Pocket Guide to Chemical Hazards: Ceiling Limit Value and Time Period (if specified)

Methylene Diphenyl Isocyanate 101-68-8 METHYLENE BISPHENYL ISOCYANATE 0.2 MGM3 - 0.020 PPM 10-min

(MDI)

US OSHA Table Z-1-A: Time Weighted Average (TWA): mg/m3 & ppm

Phenylethane 100-41-4 ETHYLBENZENE 435 MGM3 - 100 PPM

Xylenes (o-, m-, p- isomers) 1330-20-7 XYLENE (O-, M-, P- ISOMERS) 435 MGM3 - 100 PPM

# 9. Physical & Chemical Properties

Target solids 96

**Density** 1.346 g/cc Odor Solvent Various Color **Paste Physical state** Freeze protect No **VOC (Volatile Organic** 3.9 %

Compounds)

#### 10. Chemical Stability & Reactivity Information

reactions/decomposition

Material name: GPS1 Sealant Series

products

**Hazardous** 

Unknown due to the complex nature of this material. Fumes from complete or incomplete combustion may include carbon dioxide, carbon monoxide, water vapor, oxides of nitrogen and a wide variety of innocuous or toxic fumes. Additional decomposition products include oxides

of nitrogen, amines, hydrogen cyanide and isocyanate-containing compounds.

**Hazardous polymerization** Hazardous polymerization can occur with elevated temperatures or contact with water.

Conditions to avoid Avoid Strong Acids. Avoid amines, strong bases, alcohols and metallic hydrides.

**Stability** 

This product is stable under normal conditions but will react slightly with water to release some heat and carbon dioxide. The reaction is not violent. Carbon dioxide, carbon monoxide and in high temperature (800° F) low oxygen atmospheres such as in fire situations, hydrogen cyanide may be released.

# 11. Toxicological Information

Carcinogenicity This product contains Methylene Diphenyl Isocyanate (MDI). MDI is not listed by the NTP,

IARC or regulated by OSHA as a carcinogen. However, it has been shown to alter cells in certain experiments. Although inconclusive, these cellular changes are thought to indicate

potential carcinogenicity.

**Local effects** Single large does, and/or repeated exposures, may lead to sensitization to diisocyanates or

polyisocyanates (asthma or asthma-like symptoms), causing an individual to experience adverse effects at exposure levels well below exposure limits or guidelines. Symptoms may include chest tightness, wheezing, shortness of breath, coughing or asthmatic attack, and may be delayed up to several hours. Extreme asthmatic reactions can be life threatening. Once sensitized, an individual may experience adverse symptoms upon exposure to dust, cold air or other irritants. Sensitization can last several months, years or be permanent in some cases. Chronic exposure may cause lung damage, including fibrosis and decreased lung function,

## 12. Ecological Information

**Ecotoxicological information** Organic solvents produce slight to moderate toxicity to aquatic life.

which may be permanent.

# 13. Disposal Considerations

It is the obligation of each user of the product mentioned herein to determine and comply with the requirements of all applicable local, state and federal regulations.

Waste disposal Dispose of waste material according to Local, State, Federal, and Provincial Environmental

Regulations.

## 14. Transport Information

DOT

Not regulated as hazardous goods.

**IATA** 

Not regulated as hazardous goods.

**IMDG** 

Not regulated as hazardous goods.

#### 15. Regulatory Information

This MSDS is prepared and distributed pursuant to the Federal Hazard Communication Standard, 29 CFR 1910.1200

Federal regulations All components are on the U.S. EPA TSCA Inventory List.

US CWA Section 311 Reporting Quantities of Hazardous Substances: Reportable quantity

Phenylethane 100-41-4 ETHYLBENZENE 1000 LBS Xylenes (o-, m-, p- isomers) 1330-20-7 XYLENE (MIXED) 100 LBS

US TSCA Section 12(b) Export Notification: Export Notification requirement/De minimis concentration

Xylenes (o-, m-, p- isomers) 1330-20-7 P-XYLENE

**State regulations** If this product contains any ingredients listed under California Proposition 65, they will be

noted below:

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Phenylethane 100-41-4 Listed: June 11, 2004 Carcinogenic.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Diisodecyl Phthalate (DIDP) 68515-49-1 Listed: April 20, 2007 Developmental toxin.

**International regulations** This product has been classified in accordance with the hazard criteria of the Controlled

Products Regulations and contains all the information required by the Controlled Products

Regulations.

All components are included on the Canadian Domestic Substances List (DSL).

Material name: GPS1 Sealant Series

MSDS US

A / F

**HMIS Ratings** Health: 2\*

Flammability: 2 Physical hazard: 0 Personal protection: X

Controlled

SARA 311/312 HAZARD

**CATEGORIES** 

Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

WHMIS status

WHMIS labeling



WHMIS classification D2A - Other Toxic Effects-VERY TOXIC

D2B - Other Toxic Effects-TOXIC

#### 16. Other Information

**Product name(s) covered** A52312 - GPS1 WHITE

A52321 - GPS1 WHITE 12/200Z A52412 - GPS1 BLACK 24/10.1 A52421 - GPS1 BLACK 12/20OZ A52512 - GPS1 STONE 24/10.1 A52521 - GPS1 STONE 12/20OZ A66712 - GPS1 LIMESTONE 24/10.1 A66721 - GPS1 LIMESTONE 12/200Z A71410 - GPS-1 LIGHT GRAY 24/10.1

24/10.1

A72410 - GPS1 TAN 24/10.1

**Disclaimer** 

The data in this MSDS has been compiled from publicly available sources. This data relates only to the designated product and not to the use of said product in combination with other materials. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Responsibility for proper precautions and safe use of the product lies with the user. All data in this MSDS is typical of the product as a whole, and does not represent any individual lot or batch, therefore, Bostik, Inc. makes no warranty about the accuracy of the data herein and assumes no liability for the use of such data. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.

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This data sheet contains changes from the previous version in section(s):

Toxicological Information: Carcinogenicity

Material name: GPS1 Sealant Series MSDS US