DATE ISSUED: September 4, 2012 REVISION DATE: September 4, 2012 SUPERCEDES: November 10, 2009

## SECTION 1 PRODUCT IDENTIFICATION AND COMPANY IDENTIFICATION

Product Name: MSIT Speci Purge SP1000 & SP2000
Chemical Name: Thermoplastic purging compound

Chemical Family: Thermoplastic polyolefins, inert minerals, inorganic additives

Product Appearance: Translucent white pellets

Company Identification: MSI TECHNOLOGY L.L.C.
3930 Ventura Drive, Suite 355

Arlington Heights, IL 60004

**Emergency Phone Number**: 847-255-4888

## SECTION 2 HAZARD IDENTIFICATION

**Caution:** This material is combustible and will burn in fire and emit irritating smoke. Spilled product may create a slipping hazard. Released pellets should be kept away from storm sewers or other entry into aquatic systems. Molten resin may cause severe thermal burns.

## **Potential Health Effects:**

#### **Eve Contact:**

-Particulates may scratch eye surface, causing irritation.

#### **Skin Contact:**

- -Negligible hazard at ambient temperatures.
- -Exposure to hot material may cause thermal burns.

# Inhalation:

- -Negligible hazard at ambient temperatures.
- -Vapors, which may be formed at elevated temperatures, may be irritating to eyes and respiratory tract.

## Ingestion:

-Not expected to be a hazard in normal use.

## This product is not hazardous as defined in 29 CFR1910.1200

This product is not regulated as a hazardous material for transportation.

**Carcinogenicity Information:** None known. IARC, NTP, OHSA or ACGIH do not list ingredients as a carcinogen or potential carcinogen.

## **SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**

MSIT Speci Purge is an alloy of polyolefins, inert minerals and inorganic additives.

The composition of MSIT Speci Purge is proprietary and a trade secret of MSI Technology.

ComponentCAS Number% by WeightA proprietary blend of Polyolefin Polymers,N/AProprietaryInert Minerals and Inorganic Additives

Remarks: Material is not known to contain Toxic Chemicals under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

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# **NATURE OF HAZARD**

# **Eye Contact:**

-Particulates may scratch eye surface, causing irritation.

#### Skin Contact:

- -Negligible hazard at ambient temperatures.
- -Exposure to hot material may cause thermal burns.

#### Inhalation:

- -Negligible hazard at ambient temperatures.
- -Do not breathe fumes/mist which may be formed at elevated temperatures.

## Ingestion:

-Not expected to be a hazard in normal use.

#### **FIRST AID**

# **Eye Contact:**

- -This product is an inert solid. If in eye, remove as one would with any foreign object and flush eyes with clean flowing water for 15 minutes. Get medical attention immediately.
- -In the case of irritation caused by fumes during thermal processing, flush opened eyes under running water for up to 15 minutes. If irritation persists, consult a physician.

## **Skin Contact:**

-For contact with hot product, do not attempt to remove material from skin. Immediately immerse in or flush affected area with large amounts of cold water to dissipate heat. Get prompt medical attention.

### Inhalation:

-Remove to fresh air. If respiratory distress continues, seek immediate medical attention.

## Ingestion:

-Material is not expected to cause an ingestion problem. First aid is not normally required. If necessary, get medical advice.

Note to Attending Physician: If molten polymer is in contact with skin, treat as any thermal burn, after decontamination. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

# **PRECAUTIONS**

## **Personal Protection:**

-Where contact may occur with hot material, wear thermal resistant gloves, arm protection, and a face shield.

#### Ventilation:

-At conventional processing temperatures, some polymeric fumes are liberated. The airborne concentration of such polymeric fumes, which are considered a health nuisance, should be kept below 5 milligrams per cubic meter. Local exhaust ventilation of process equipment may be needed to control exposure to below the recommended exposure limit.

# **SECTION 5 FIRE FIGHTING MEASURES**

Flashpoint: Not Established Flammable Limits: Not Established

Autoignition Temperature: 330°C - 410°C (Estimated)

#### **General Hazard:**

Under fire conditions, the solid pellets will readily burn and emit a heavy, irritating smoke. Solid material may burn at or above the flashpoint. If thermally decomposed, flammable/toxic gases may be released.

## Fire Fighting:

## **Extinguishing Media**

- Water, Foam, Dry Chemical, CO2.

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# **Fire Fighting Instructions**

- -Use water spray to cool fire exposed surfaces.
- -Respiratory and eye protection required for fire fighting personnel.
- -Wear self-contained breathing apparatus.
- -Wear Protective Fire Fighting Clothing.
- -After extinguishing, soak the material thoroughly with water to prevent re-ignition.

# **Decomposition Products under Fire Conditions:**

Hazardous vapors or gases may be released, such as carbon monoxide and hydrocarbon oxidation products (including organic acids, aldehydes, and alcohols)

#### SECTION 6 ACCIDENTAL RELEASE MEASURES

### Land Spill:

- -Extinguish or remove possible ignition sources.
- -Recover spilled material and place in suitable container for recycle or disposal.
- -Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

# Water Spill:

- -Recover spilled material and place in suitable container for recycle or disposal.
- -Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

Notify applicable government authority if release is reportable or could adversely affect the environment.

### SECTION 7 HANDLING AND STORAGE

Handling: See FIRST AID and EXPOSURE CONTROL / PERSONAL PROTECTION sections

Electrostatic Accumulation Hazard: Yes, use proper grounding procedure

Storage Temperature: Ambient temperatures. Avoid high temperatures, sparks, and open flames.

Storage/Transport Pressure: Not applicable Loading/Unloading Temperature: Not applicable

Viscosity at Loading/Unloading Temperature: Not applicable

Store the material in a covered container to prevent contamination and degradation due to sunlight.

#### SECTION 8 EXPOSURE CONTROL / PERSONAL PROTECTION

# **Exposure Guidelines**

**Particulates** 

ACGIH 10 mg/m<sup>3</sup> TWA (inhalable particles)

3 mg/m<sup>3</sup> TWA (resperable particles)

OSHA 15 mg/m<sup>3</sup> TWA (total dust)

5 mg/m<sup>3</sup> TWA (resperable fraction)

# **Engineering Controls**

Good general ventilation is acceptable for most conditions Local ventilation must be used over processing equipment.

## **Personal Protective Equipment**

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<u>Eyes/Face:</u> Wear safety glasses with side shield. Wear face shield during thermal processing and when cleaning condensed fumes from hoods, ducts and other surfaces.

Skin Protection: Wear thermal insulating gloves when handling molten material.

<u>Respiratory Protection:</u> Not normally needed. Use a NIOSH/MSHA approved respirator, with combined organic vapor/dust, mist or fume cartridge, if required.

Safety shower and eye wash station should be located close to chemical exposure area in case of malfunction of process equipment.

#### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Physical state / appearance**: Translucent/white solid pellets **Odor**: Faint, mild hydrocarbon odor

Odor threshold: Not available Not applicable pH: 100 - 120°C Melting Point: Boiling Point / Boiling Point Range: Not applicable Flash Point: Not available **Evaporation Rate**: Not applicable **Upper/Lower Flammability Limits:** Not applicable **Vapor Pressure:** Not applicable Vapor Density: Not applicable **Specific Gravity:** 0.92-1.00

Solubility: Not soluble in water Partial coefficient/n-Octanol/Water: Not applicable
Auto-Ignition Temperature: >300 °C (estimated)

### SECTION 10 STABILITY AND REACTIVITY

# Stability:

-Stable under ambient conditions

# **Conditions to Avoid Instability:**

-Store away from heat, flames, oxidizers, acids and bases.

# Materials and Conditions to Avoid Incompatibility:

- -Strong oxidizers, acids and bases
- -Organic solvents may partially dissolve and degrade the material

# **Hazardous Decomposition Products:**

-Combustion products may include and are not limited to carbon dioxide, carbon monoxide and hydrocarbon oxidation products (including organic acids, aldehydes, and alcohols)

#### **Hazardous Polymerization:**

-Will not occur

# **Conditions to Avoid Hazardous Polymerization:**

-Not applicable

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## **Acute Toxicity**

General Information:

-Material is considered biologically inert

-Exposure to high levels of heated fumes may cause irritation

Reproductive Effects: Not a reproductive toxin.

Mutagenicity Data: Not mutagenic Teratogenicity Data: Not teratogenic Synergistic Materials: None known

Inhalation: Processing may release vapors which are irritating to eyes, nose and respiratory tract.

#### SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity:** Biologically inert and non-toxic

Persistence / Degradability: It is stable in a landfill and in aquatic systems

Bioaccumulation / Accumulation: The pellets may accumulate in the digestive systems, if ingested by wildlife or fish.

Mobility: If released into aquatic systems, the material will float and flow with the current. The product should be

recovered from the water.

**Deactivating Chemicals:** None required

## SECTION 13 DISPOSAL CONSIDERATION

Preferred options for disposal are:

- 1) recycling
- 2) incineration with energy recovery
- 3) landfill

The high fuel value of this product makes option 2 very desirable for material that cannot be recycled.

Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulations.

#### SECTION 14 TRANSPORTATION INFORMATION

**DOT Shipping Name:** Not Regulated as a Hazardous Material for Transport

**DOT Label:**Not Applicable **DOT Identification Number:**Not Applicable

## **SECTION 15 REGULATORY INFORMATION**

### TSCA:

-All ingredients in this product are listed on the TSCA Inventory.

## **CERCLA:**

-If this product is accidentally spilled, it is not subject to any specific reporting under the requirements of CERCLA. We recommend that you contact local authorities to determine if there may be other local reporting requirements.

## **SARA TITLE III:**

-Under the provisions of Title III, Sections 311/312 of the Superfund Amendments and Reauthorization Act, this product is classified into the following hazard categories:

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## **NOT HAZARDOUS**

-This product does not contain any chemical components with known CAS numbers that exceed the De Minimis reporting levels established by SARA Title III, Section 313 and 40 CFR 372.

For information on food-contact compliance, please contact your account manager.

Reference Number: MSIT2009001 Date Prepared: 9/4/12 Supersedes Issue Date: Original 11/10/2009

For Additional Health and Safety Information, Call: 847-255-4888

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