



# Material Safety Data Sheet

Issue Date: 19-MAY-2011  
Supersedes: 06-MAY-2011

DEPOSITROL BL5600

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## 1 Identification

**Identification of substance or preparation**  
DEPOSITROL BL5600

**Product Application Area**  
Water-based deposit control agent.

**Company/Undertaking Identification**  
GE Betz, Inc.  
4636 Somerton Road  
Trevose, PA 19053  
T 215 355-3300, F 215 953 5524

**Emergency Telephone**  
(800) 877-1940

Prepared by Product Stewardship Group: T 215-355-3300    Prepared on: 19-MAY-2011

## 2 Hazard(s) identification

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**EMERGENCY OVERVIEW**

**CAUTION**

May cause slight irritation to the skin. May cause moderate irritation to the eyes. Mists/aerosols may cause irritation to upper respiratory tract.

DOT hazard: Corrosive to steel  
Odor: None; Appearance: Colorless To Yellow, Liquid

Fire fighters should wear positive pressure self-contained breathing apparatus(full face-piece type). Proper fire-extinguishing media: dry chemical, carbon dioxide, foam or water

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**POTENTIAL HEALTH EFFECTS**

**ACUTE SKIN EFFECTS:**

Primary route of exposure; May cause slight irritation to the skin.

**ACUTE EYE EFFECTS:**

May cause moderate irritation to the eyes.

**ACUTE RESPIRATORY EFFECTS:**

Mists/aerosols may cause irritation to upper respiratory tract.

**INGESTION EFFECTS:**

May cause slight gastrointestinal irritation with possible nausea, vomiting, abdominal discomfort and diarrhea.

**TARGET ORGANS:**

No evidence of potential chronic effects.

**MEDICAL CONDITIONS AGGRAVATED:**

Not known.

**SYMPTOMS OF EXPOSURE:**

May cause redness or itching of skin.

### 3 Composition / information on ingredients

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation. This product is subject to the Pennsylvania and New Jersey Worker and Community Right to Know Law.

**HAZARDOUS INGREDIENTS:**

| Cas#       | Chemical Name   | Range (w/w%) |
|------------|---|--------------|
| 37971-36-1 | 2-PHOSPHONOBUTANE-1,2,4-TRICARBOXYLIC ACID<br>Irritant (eyes) | 40-70        |

**NON-HAZARDOUS INGREDIENTS:**

| CAS#      | CHEMICAL NAME |
|-----------|---------------|
| 7732-18-5 | WATER         |

### 4 First-aid measures

**SKIN CONTACT:**

Wash thoroughly with soap and water. Remove contaminated clothing. Thoroughly wash clothing before reuse. Get medical attention if irritation develops or persists.

**EYE CONTACT:**

Remove contact lenses. Hold eyelids apart. Immediately flush eyes with plenty of low-pressure water for at least 15 minutes. Get immediate medical attention.

**INHALATION:**

Remove to fresh air. Get medical attention if irritation persists.

**INGESTION:**

Do not feed anything by mouth to an unconscious or convulsive victim. Do not induce vomiting. Immediately contact physician. Dilute contents of stomach using 2-8 fluid ounces (60-240 mL) of milk or water.

**NOTES TO PHYSICIANS:**

No special instructions

### 5 Fire-fighting measures

**FIRE FIGHTING INSTRUCTIONS:**

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

**EXTINGUISHING MEDIA:**

dry chemical, carbon dioxide, foam or water

**HAZARDOUS DECOMPOSITION PRODUCTS:**

oxides of carbon and phosphorus

**FLASH POINT:**

> 200F > 93C P-M(CC)

**MISCELLANEOUS:**

Corrosive to steel

UN 3265;Emergency Response Guide #153

## 6 Accidental release measures

**PROTECTION AND SPILL CONTAINMENT:**

Ventilate area. Use specified protective equipment. Contain and absorb on absorbent material. Place in waste disposal container.

Flush area with water. Wet area may be slippery. Spread sand/grit.

**DISPOSAL INSTRUCTIONS:**

Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement, a permitted waste treatment facility or discharged under a permit. Product as is - Incinerate or land dispose in an approved landfill.

## 7 Handling and storage

**HANDLING:**

Corrosive to metal.

**STORAGE:**

Keep containers closed when not in use. Use approved containers only. Avoid high temperature storage. Store away from strong bases. Do not store in steel or aluminum containers.

## 8 Exposure controls / personal protection

**EXPOSURE LIMITS****CHEMICAL NAME**

2-PHOSPHONOBUTANE-1,2,4-TRICARBOXYLIC ACID

PEL (OSHA): LIMITS HAVE NOT BEEN ESTABLISHED BY US OSHA.

TLV (ACGIH): LIMITS HAVE NOT BEEN ESTABLISHED BY ACGIH.

**ENGINEERING CONTROLS:**

adequate ventilation

**PERSONAL PROTECTIVE EQUIPMENT:**

Use protective equipment in accordance with 29CFR 1910 Subpart I

**RESPIRATORY PROTECTION:**

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE. USE AIR PURIFYING RESPIRATORS WITHIN USE LIMITATIONS ASSOCIATED WITH THE EQUIPMENT OR ELSE USE SUPPLIED AIR-RESPIRATORS. If air-purifying respirator use is appropriate, use any of the following particulate respirators: N95, N99, N100, R95, R99, R100, P95, P99 or P100.

**SKIN PROTECTION:**

PVC gloves-- Wash off after each use. Replace as necessary.

**EYE PROTECTION:**

splash proof chemical goggles

## 9 Physical and chemical properties

|                         |       |                       |        |
|-------------------------|-------|-----------------------|--------|
| Spec. Grav. (70F, 21C)  | 1.284 | Vapor Pressure (mmHG) | ~ 18.0 |
| Freeze Point (F)        | 3     | Vapor Density (air=1) | < 1.00 |
| Freeze Point (C)        | -16   |                       |        |
| Viscosity(cps 70F, 21C) | 38    | % Solubility (water)  | 100.0  |

|                            |                      |
|----------------------------|----------------------|
| Odor                       | None                 |
| Appearance                 | Colorless To Yellow  |
| Physical State             | Liquid               |
| Flash Point                | P-M(CC) > 200F > 93C |
| pH As Is (approx.)         | 1.9                  |
| Evaporation Rate (Ether=1) | < 1.00               |
| Percent VOC:               | 0.0                  |

NA = not applicable ND = not determined

## 10 Stability and reactivity

**CHEMICAL STABILITY:**

Stable under normal storage conditions.

**POSSIBILITY OF HAZARDOUS REACTIONS:**

Contact with strong bases may cause a violent reaction releasing heat. Contact with water reactive compounds may cause fire or explosion.

**INCOMPATIBILITIES:**

May react with bases or strong oxidizers.

**DECOMPOSITION PRODUCTS:**

oxides of carbon and phosphorus

## 11 Toxicological information

|   |             |
|---|-------------|
| Oral LD50 RAT:  | >5000 mg/kg |
| NOTE - Calculated value according to GHS additivity formula |             |
| Teratology ANIMALS:   | NEGATIVE    |
| Dermal LD50 RAT:  | >5000 mg/kg |
| NOTE - Calculated value according to GHS additivity formula |             |
| 90 Day Feed Study ANIMALS:                                  | NEGATIVE    |
| NOTE - No adverse effects observed                          |             |
| Ames Assay :  | NEGATIVE    |
| Non-Ames Mutagenicity :                                     | NEGATIVE    |

## 12 Ecological information

**AQUATIC TOXICOLOGY**

Ceriodaphnia 48 Hour Static Renewal Bioassay (pH adjusted)

LC50= 1190; 30% Mortality= 893 mg/L

Daphnia magna 48 Hour Static Renewal Bioassay (pH adjusted)

LC50= 2070; No Effect Level= 890 mg/L  
Fathead Minnow 96 Hour Static Bioassay with 48-Hour Renewal (pH  
adjusted)  
0% Mortality= 5000 mg/L  
Rainbow Trout 96 Hour Static Acute Bioassay  
No Effect Level= 5300 mg/L

#### **BIODEGRADATION**

BOD-28 (mg/g): 22  
BOD-5 (mg/g): 22  
COD (mg/g): 410  
TOC (mg/g): 160

## **13 Disposal considerations**

If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is :  
D002=Corrosive(pH, steel).

Please be advised; however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

## **14 Transport information**

Transportation Hazard: Corrosive to steel  
DOT: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.(2-PHOSPHONO-1,2,4,  
BUTANETRICARBOXYLIC ACID)  
8, UN 3265, PG III  
DOT EMERGENCY RESPONSE GUIDE #: 153  
Note: Some containers may be DOT exempt, please check BOL for exact container classification  
IATA: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.(2-PHOSPHONO-1,2,4,  
BUTANETRICARBOXYLIC ACID)  
8, UN 3265, PG III  
IMDG: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.(2-PHOSPHONO-1,2,4-  
BUTANETRICARBOXYLIC)  
8, UN 3265, PG III

## **15 Regulatory information**

#### **TSCA:**

All components of this product are included on or are in compliance with the U.S. TSCA regulations.

#### **CERCLA AND/OR SARA REPORTABLE QUANTITY (RQ):**

No regulated constituent present at OSHA thresholds

#### **NSF Registered and/or meets USDA (according to 1998 Guidelines):**

Registration number: Not Registered

#### **SARA SECTION 312 HAZARD CLASS:**

Immediate(acute);Reactive

#### **SARA SECTION 302 CHEMICALS:**

No regulated constituent present at OSHA thresholds

#### **SARA SECTION 313 CHEMICALS:**

No regulated constituent present at OSHA thresholds

#### **CALIFORNIA REGULATORY INFORMATION**

**CALIFORNIA SAFE DRINKING WATER AND TOXIC  
ENFORCEMENT ACT (PROPOSITION 65):**

No regulated constituents present

**MICHIGAN REGULATORY INFORMATION**

No regulated constituent present at OSHA thresholds

## 16 Other information

| HMIS vII                 |      | CODE TRANSLATION |
|--------------------------|------|------------------|
| Health                   | 1    | Slight Hazard    |
| Fire                     | 1    | Slight Hazard    |
| Reactivity               | 1    | Slight Hazard    |
| Special                  | CORR | DOT corrosive    |
| (1) Protective Equipment | B    | Goggles,Gloves   |

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

### CHANGE LOG

|              | EFFECTIVE<br>DATE | REVISIONS TO SECTION: | SUPERCEDES  |
|--------------|-------------------|-----------------------|-------------|
|              | -----             | -----                 | -----       |
| MSDS status: | 18-NOV-2009       |                       | ** NEW **   |
|              | 06-MAY-2011       | 5,10                  | 18-NOV-2009 |
|              | 19-MAY-2011       | 7                     | 06-MAY-2011 |