

**Product Name:** BEAM\* 75WP FUNGICIDE**Issue Date:** 2011/10/06**Print Date:** 02 May 2019

Dow AgroSciences India Pvt. Ltd. encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

**1. Identification of the substance/preparation and of the company/undertaking****Product Name**

BEAM\* 75WP FUNGICIDE

**COMPANY IDENTIFICATION**

Dow AgroSciences India Pvt. Ltd.  
A Subsidiary of The Dow Chemical Company  
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India

Customer Information Number:

91 22 6674 1700

[SDSQuestion@dow.com](mailto:SDSQuestion@dow.com)**EMERGENCY TELEPHONE NUMBER****24-Hour Emergency Contact:**

91-2356-272046

**Local Emergency Contact:**

91 22 67978600

**2. Composition/information on ingredients**

Component	Amount	Classification:	CAS #	EC #
5-methyl-1,2,4-triazolo(3,4-b)benzo-1,3-thiazole; tricyclazole	78.2 %	Xn: R22	41814-78-2	255-559-5
Kaolin	< 10.0 %	Not classified.	1332-58-7	310-194-1
Silica gel, precipitated, crystalline-free	< 10.0 %	Not classified.	112926-00-8	231-545-4
Sodium lignosulfonate	< 5.0 %	Not classified.	8061-51-6	Polymer
Sodium lauryl sulfate	< 5.0 %	Xi: R36/38	151-21-3	205-788-1

See Section 16 for full text of R-phrases.

### 3. Hazards Identification

Harmful if swallowed.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 4. First-aid measures

#### Description of first aid measures

**Inhalation:** Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice.

**Skin Contact:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**Eye Contact:** Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.

**Ingestion:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Never give anything by mouth to an unconscious person.

#### Most important symptoms and effects, both acute and delayed

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), no additional symptoms and effects are anticipated.

#### Indication of immediate medical attention and special treatment needed

No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment.

### 5. Fire Fighting Measures

#### Suitable extinguishing media

Water. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers.

#### Special hazards arising from the substance or mixture

**Hazardous Combustion Products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Sulfur oxides. Nitrogen oxides. Carbon monoxide. Carbon dioxide.

**Unusual Fire and Explosion Hazards:** Do not permit dust to accumulate. When suspended in air dust can pose an explosion hazard. Minimize ignition sources. If dust layers are exposed to elevated temperatures, spontaneous combustion may occur. Dense smoke is produced when product burns.

#### Advice for firefighters

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. Cool surroundings with water to localize fire zone. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS.

**Special Protective Equipment for Firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire

from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

## 6. Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Keep upwind of spill. Spilled material may cause a slipping hazard. Ventilate area of leak or spill. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

**Methods and materials for containment and cleaning up:** Contain spilled material if possible. Small spills: Sweep up. Collect in suitable and properly labeled containers. Large spills: Contact Dow AgroSciences for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

## 7. Handling and Storage

### Handling

**General Handling:** Keep away from heat, sparks and flame. No smoking, open flames or sources of ignition in handling and storage area. Keep out of reach of children. Do not swallow. Avoid breathing dust or mist. Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Wash thoroughly after handling. Keep container closed. Good housekeeping and controlling of dusts are necessary for safe handling of product. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

### Storage

Store in a dry place. Store in original container. Do not store near food, foodstuffs, drugs or potable water supplies.

## 8. Exposure Controls / Personal Protection

### Exposure Limits

Component	List	Type	Value
Kaolin	ACGIH	TWA Respirable fraction.	2 mg/m <sup>3</sup> The value is for particulate matter containing no asbestos and <1% crystalline silica.
Silica gel, precipitated, crystalline-free	IN OEL	TWA Total dust.	10 mg/m <sup>3</sup>

RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

### Personal Protection

**Eye/Face Protection:** Use chemical goggles. Chemical goggles should be consistent with EN 166 or equivalent.

**Skin Protection:** No precautions other than clean body-covering clothing should be needed.

**Hand protection:** Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized.

**Respiratory Protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use an approved respirator. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus. Use the following CE approved air-purifying respirator: Organic vapor cartridge with a particulate pre-filter, type AP2.

**Ingestion:** Avoid ingestion of even very small amounts; do not consume or store food or tobacco in the work area; wash hands and face before smoking or eating.

### Engineering Controls

**Ventilation:** Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

## 9. Physical and Chemical Properties

### Appearance

Physical State	Powder
Color	Tan
Odor	Odorless
Odor Threshold	Odorless
pH	Not applicable
Melting Point	> 125 °C
Freezing Point	Not applicable
Boiling Point (760 mmHg)	Not applicable.
Flash Point - Closed Cup	Not applicable
Evaporation Rate (Butyl Acetate = 1)	No test data available
Flammable Limits In Air	<b>Lower:</b> Not applicable <b>Upper:</b> <i>Literature</i> Not applicable
Vapor Pressure	Not applicable
Vapor Density (air = 1)	Not applicable
Specific Gravity (H <sub>2</sub> O = 1)	Not applicable
Solubility in water (by weight)	emulsifiable
Autoignition Temperature	Not applicable
Decomposition Temperature	No test data available
Dynamic Viscosity	Not applicable
Kinematic Viscosity	Not applicable
Bulk Density	0.3 - 0.4 g/cm <sup>3</sup>

## 10. Stability and Reactivity

### Reactivity

No dangerous reaction known under conditions of normal use.

### Chemical stability

Thermally stable at recommended temperatures and pressures.

### Possibility of hazardous reactions

Polymerization will not occur.

**Conditions to Avoid:** Exposure to elevated temperatures can cause product to decompose.

**Incompatible Materials:** None known.

**Hazardous decomposition products**

Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Carbon monoxide. Carbon dioxide. Nitrogen oxides. Sulfur oxides.

**11. Toxicological Information****Acute Toxicity****Ingestion**

Moderate toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause serious injury, even death.

LD50, Rat, female 180 - 275 mg/kg

**Dermal**

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

LD50, Rabbit, male and female > 2,000 mg/kg

**Inhalation**

Dust may cause irritation of the upper respiratory tract (nose and throat) and lungs. Prolonged excessive exposure to dust may cause adverse effects.

LC50, 4 h, Aerosol, Rat, male and female > 2 mg/l

**Eye damage/eye irritation**

Solid or dust may cause irritation or corneal injury due to mechanical action. May cause moderate eye irritation. May cause slight temporary corneal injury.

**Skin corrosion/irritation**

Prolonged contact is essentially nonirritating to skin.

**Sensitization****Skin**

Did not cause allergic skin reactions when tested in guinea pigs.

**Repeated Dose Toxicity**

For the active ingredient(s): In animals, effects have been reported on the following organs: Liver. Kidney. Testes. Gall bladder. Based on information for component(s): Repeated excessive exposure to crystalline silica may cause silicosis, a progressive and disabling disease of the lungs. Repeated skin application to laboratory animals did not produce systemic toxicity.

**Chronic Toxicity and Carcinogenicity**

Active ingredient did not cause cancer in laboratory animals.

**Developmental Toxicity**

For the active ingredient(s): Did not cause birth defects or any other fetal effects in laboratory animals. For the minor component(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother.

**Reproductive Toxicity**

For the active ingredient(s): In animal studies, did not interfere with reproduction. For the majority of components: No relevant information found.

**Genetic Toxicology**

For the active ingredient(s): For the component(s) tested: In vitro genetic toxicity studies were negative. For the active ingredient(s): For the component(s) tested: Animal genetic toxicity studies were negative.

**12. Ecological Information****Toxicity**

Material is harmful to aquatic organisms (LC50/EC50/IC50 between 10 and 100 mg/L in the most sensitive species).

**Fish Acute & Prolonged Toxicity**

EC50, sheepshead minnow (*Cyprinodon variegatus*), static, 96 h: 12 mg/l

LC50, rainbow trout (*Oncorhynchus mykiss*), static, 96 h: 10.3 mg/l

LC50, bluegill (*Lepomis macrochirus*), static, 96 h: 15.6 mg/l

#### Aquatic Invertebrate Acute Toxicity

EC50, water flea *Daphnia magna*, static, 48 h, immobilization: > 40 mg/l

#### Persistence and Degradability

Data for Component: **5-methyl-1,2,4-triazolo(3,4-b)benzo-1,3-thiazole; tricyclazole**

|| No relevant information found.

Data for Component: **Kaolin**

|| Biodegradation is not applicable.

Data for Component: **Silica gel, precipitated, crystalline-free**

|| Biodegradation is not applicable.

Data for Component: **Sodium lignosulfonate**

|| No relevant information found.

#### Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
1.089E-10 cm <sup>3</sup> /s	0.098 d	Estimated.

Data for Component: **Sodium lauryl sulfate**

#### OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method	10 Day Window
85 %	14 d	OECD 301C Test	Not applicable

#### Bioaccumulative potential

Data for Component: **5-methyl-1,2,4-triazolo(3,4-b)benzo-1,3-thiazole; tricyclazole**

|| **Partition coefficient, n-octanol/water (log Pow):** 0.411 Estimated.

Data for Component: **Kaolin**

|| **Bioaccumulation:** Partitioning from water to n-octanol is not applicable.

Data for Component: **Silica gel, precipitated, crystalline-free**

|| **Bioaccumulation:** Partitioning from water to n-octanol is not applicable.

Data for Component: **Sodium lignosulfonate**

|| **Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

|| **Partition coefficient, n-octanol/water (log Pow):** -3.45 Estimated.

|| **Bioconcentration Factor (BCF):** 3.2; fish

Data for Component: **Sodium lauryl sulfate**

|| **Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

|| **Partition coefficient, n-octanol/water (log Pow):** 1.6 Measured

#### Mobility in soil

Data for Component: **5-methyl-1,2,4-triazolo(3,4-b)benzo-1,3-thiazole; tricyclazole**

Data for Component: **Kaolin**

|| **Mobility in soil:** No relevant data found.

Data for Component: **Silica gel, precipitated, crystalline-free**

|| **Mobility in soil:** No relevant data found.

Data for Component: **Sodium lignosulfonate**

|| **Mobility in soil:** Expected to be relatively immobile in soil (Koc > 5000).

|| **Partition coefficient, soil organic carbon/water (Koc):** > 99,999 Estimated.

|| **Henry's Law Constant (H):** 9.43E-25 atm\*m<sup>3</sup>/mole; 25 °C Estimated.

Data for Component: **Sodium lauryl sulfate**

|| **Mobility in soil:** Expected to be relatively immobile in soil (Koc > 5000)., Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

|| **Partition coefficient, soil organic carbon/water (Koc):** > 5,000 Estimated.

|| **Henry's Law Constant (H):** 1.84E-07 atm\*m<sup>3</sup>/mole; 25 °C Estimated.

### 13. Disposal Considerations

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

### 14. Transport Information

#### ROAD & RAIL

**Proper Shipping Name:** PESTICIDES, SOLID, TOXIC, N.O.S.

**Technical Name:** TRICYCLAZOLE

**Hazard Class:** 6.1 **ID Number:** UN2588 **Packing Group:** PG III

**Environmental Hazard:** Yes

#### OCEAN

**Proper Shipping Name:** PESTICIDES, SOLID, TOXIC, N.O.S.

**Technical Name:** TRICYCLAZOLE

**Hazard Class:** 6.1 **ID Number:** UN2588 **Packing Group:** PG III

**EMS Number:** F-A,S-A

**Marine pollutant.:** Yes

#### AIR

**Proper Shipping Name:** PESTICIDES, SOLID, TOXIC, N.O.S.

**Technical Name:** TRICYCLAZOLE

**Hazard Class:** 6.1 **ID Number:** UN2588 **Packing Group:** PG III

**Cargo Packing Instruction:** 677

**Passenger Packing Instruction:** 670

**Environmental Hazard:** Yes

#### INLAND WATERWAYS

**Proper Shipping Name:** PESTICIDES, SOLID, TOXIC, N.O.S.

**Technical Name:** TRICYCLAZOLE

**Hazard Class:** 6.1 **ID Number:** UN2588 **Packing Group:** PG III

**Environmental Hazard:** Yes

*This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.*

### 15. Regulatory Information

#### European Inventory of Existing Commercial Chemical Substances (EINECS)

The components of this product are on the EINECS inventory or are exempt from inventory requirements.

**Classification and User Label Information****Hazard Symbol:**

Xn - Harmful.

N - Dangerous for the environment.

**Risk Phrases :**

R22 - Harmful if swallowed.

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety Phrases :**

S35 - This material and its container must be disposed of in a safe way.

S57 - Use appropriate containment to avoid environmental contamination.

To avoid risks to man and the environment, comply with the instructions for use.

<b>16. Other Information</b>
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**Risk-phrases in the Composition section**

R22 Harmful if swallowed.

R36/38 Irritating to eyes and skin.

**Revision**

Identification Number: 62288 / 4068 / Issue Date 2011/10/06 / Version: 3.0

DAS Code: GF-1455

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

**Legend**

N/A	Not available
W/W	Weight/Weight
OEL	Occupational Exposure Limit
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
ACGIH	American Conference of Governmental Industrial Hygienists, Inc.
DOW IHG	Dow Industrial Hygiene Guideline
WEEL	Workplace Environmental Exposure Level
HAZ_DES	Hazard Designation

*Dow AgroSciences India Pvt. Ltd. urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.*