Dow AgroSciences LLC 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. Product and Company Identification

**Product Name**
TRANSLINE* Herbicide

**COMPANY IDENTIFICATION**
Dow AgroSciences LLC
A Subsidiary of The Dow Chemical Company
9330 Zionsville Road
Indianapolis, IN 46268-1189
USA

Customer Information Number: 800-992-5994
SDSQuestion@dow.com

**EMERGENCY TELEPHONE NUMBER**

**24-Hour Emergency Contact:** 800-992-5994
**Local Emergency Contact:** 352-323-3500

## 2. Hazards Identification

### Emergency Overview
**Color:** Red to brown
**Physical State:** Liquid.
**Odor:** Sweet
**Hazards of product:**

CAUTION! Combustible liquid and vapor. May cause eye irritation. May cause skin irritation. May cause respiratory tract irritation. Vapor explosion hazard. Vapors may travel a long distance; ignition and/or flash back may occur. Isolate area. Keep upwind of spill. Stay out of low areas. Eliminate ignition sources. Toxic fumes may be released in fire situations.

### OSHA Hazard Communication Standard
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### Potential Health Effects

**Eye Contact:** May cause mild eye discomfort. May cause eye irritation. May cause slight temporary corneal injury. Mist may cause eye irritation. Vapor may cause eye irritation experienced as mild discomfort and redness.
**Skin Contact:** Prolonged contact may cause slight skin irritation with local redness.
**Skin Absorption:** Prolonged skin contact is unlikely to result in absorption of harmful amounts.
**Inhalation:** Mist may cause irritation of upper respiratory tract (nose and throat) and lungs. Excessive exposure (400 ppm) to isopropanol may cause eye, nose and throat irritation. Incoordination, confusion, hypotension, hypothermia, circulatory collapse, respiratory arrest and death may follow a longer duration or higher levels. Observations in animals include middle ear lining damage upon exposure to vapors of isopropanol. However, the relevance of this to humans is unknown
**Ingestion:** Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. Observations in animals include: Lethargy.
**Aspiration hazard:** Based on available information, aspiration hazard could not be determined.
**Effects of Repeated Exposure:** For the active ingredient(s): Based on available data, repeated exposures are not expected to cause significant adverse effects except at very high aerosol concentrations. Repeated excessive aerosol exposures may cause respiratory tract irritation and even death. Based on information for component(s): In animals, effects have been reported on the following organs: Liver. Kidney.
**Birth Defects/Developmental Effects:** For similar active ingredient(s). Clopyralid caused birth defects in test animals, but only at greatly exaggerated doses that were severely toxic to the mothers. No birth defects were observed in animals given clopyralid at doses several times greater than those expected during normal exposure. Based on information for component(s): Isopropanol has been toxic to the fetus in laboratory animals at doses toxic to the mother.

## 3. Composition Information

| Component | CAS # | Amount |
|---|---|---|
| Clopyralid monoethanolamine salt | 57754-85-5 | 40.9 % |
| Isopropanol | 67-63-0 | 5.0 % |
| Ethylene oxide, propylene oxide and di-sec-butylphenol polymer | 69029-39-6 | 1.0 % |
| Balance | | 53.1 % |

## 4. First-aid measures

**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. Suitable emergency eye wash facility should be available in work area.
**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. Suitable emergency safety shower facility should be available in work area.
**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. If breathing is difficult, oxygen should be administered by qualified personnel.
**Ingestion:** No emergency medical treatment necessary.
**Notes to Physician:** Maintain adequate ventilation and oxygenation of the patient. May cause asthma-like (reactive airways) symptoms. Bronchodilators, expectorants, antitussives and corticosteroids may be of help. Hemodialysis may be of benefit if substantial amounts have been ingested and the patient is showing signs of intoxication. Consider hemodialysis for patients with persistent hypotension or coma unresponsive to standard therapy (isopropanol levels >400 - 500 mg/dl). (Goldfrank 1998, King et al, 1970). 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.
**Medical Conditions Aggravated by Exposure:** Repeated excessive exposure may aggravate preexisting lung disease.
**Emergency Personnel Protection:** First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

## 5. Fire Fighting Measures

**Extinguishing Media:** To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.
**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Move container from fire area if this is possible without hazard. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam. 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.
**Unusual Fire and Explosion Hazards:** This material will not burn until the water has evaporated. Residue can burn. Container may rupture from gas generation in a fire situation.
**Hazardous Combustion Products:** Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Combustion products may include and are not limited to: Nitrogen oxides. Hydrogen chloride. Carbon monoxide. Carbon dioxide.

## 6. Accidental Release Measures

**Steps to be Taken if Material is Released or Spilled:** Contain spilled material if possible. Pump with explosion-proof equipment. If available, use foam to smother or suppress. Small spills: Absorb with materials such as: Clay. Dirt. Sand. 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.
**Personal Precautions:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Keep personnel out of low areas. Keep upwind of spill. Ventilate area of leak or spill. No smoking in area. Eliminate all sources of ignition in vicinity of spill or released vapor to avoid fire or explosion. Ground and bond all containers and handling equipment. Vapor explosion hazard. Keep out of sewers. 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.

## 7. Handling and Storage

### Handling
**General Handling:** Keep out of reach of children. Do not swallow. Avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Wash thoroughly after handling. Keep container closed. Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers. Use of non-sparking or explosion-proof equipment may be necessary, depending upon the type of operation. Keep away from heat, sparks and flame. No smoking, open flames or sources of ignition in handling and storage area. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas. Ignition and/or flash back may occur. Electrically ground and bond all equipment.

### Storage
Minimize sources of ignition, such as static build-up, heat, spark or flame. Store in a dry place. Store in original container. Keep container tightly closed when not in use. Do not store near food, foodstuffs, drugs or potable water supplies.

## 8. Exposure Controls / Personal Protection

### Exposure Limits

| Component | List | Type | Value |
|---|---|---|---|
| **Isopropanol** | OSHA Table Z-1 | PEL | 980 mg/m3 400 ppm |
| | ACGIH | TWA | 200 ppm |
| | ACGIH | STEL | 400 ppm |
| **Ethylene oxide, propylene oxide and di-sec-butylphenol polymer** | Dow IHG | TWA | 2 mg/m3 |

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 safety glasses (with side shields). If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles. If exposure causes eye discomfort, use a full-face respirator.
**Skin Protection:** Wear clean, body-covering clothing.

**Hand protection:** Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Chlorinated polyethylene. Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Viton. Examples of acceptable glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**Respiratory Protection:** Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required, use an approved air-purifying or positive-pressure supplied-air respirator depending on the potential airborne concentration. For emergency and other conditions where the exposure guideline may be exceeded, use an approved positive-pressure self-contained breathing apparatus or positive-pressure air line with auxiliary self-contained air supply. In confined or poorly ventilated areas, use an approved self-contained breathing apparatus or positive pressure air line with auxiliary self-contained air supply. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.
**Ingestion:** Use good personal hygiene. Do not consume or store food in the work area. Wash hands 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

| | |
|---|---|
| **Physical State** | Liquid. |
| **Color** | Red to brown |
| **Odor** | Sweet |
| **Flash Point - Closed Cup** | 47.2 °C (117.0 °F) *Closed Cup* |
| **Flammable Limits In Air** | **Lower**: No test data available<br>**Upper**: No test data available |
| **Autoignition Temperature** | No test data available |
| **Vapor Pressure** | 23.5 mmHg @ 20 °C |
| **Boiling Point (760 mmHg)** | 100 °C (212 °F) . |
| **Vapor Density (air = 1)** | 1.06 @ 20 °C |
| **Specific Gravity (H2O = 1)** | 1.161 |
| **Liquid Density** | 1.161 g/cm3 @ 20 °C *Calculated* |
| **Freezing Point** | No test data available |
| **Melting Point** | Not applicable |
| **Solubility in water (by weight)** | Miscible with water |
| **pH** | 7.5 - 8.0 |
| **Decomposition Temperature** | No test data available |
| **Partition coefficient, n-octanol/water (log Pow)** | No data available for this product. See Section 12 for individual component data. |
| **Evaporation Rate (Butyl Acetate = 1)** | No test data available |
| **Dynamic Viscosity** | 7 cPs |
| **Kinematic Viscosity** | No test data available |

## 10. Stability and Reactivity

### Stability/Instability

Unstable at elevated temperatures.

**Conditions to Avoid:** Active ingredient decomposes at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems. Pressure build-up can be rapid. Avoid direct sunlight.

**Incompatible Materials:** Avoid contact with: Acids. Halogenated organics. Oxidizers. Avoid contact with metals such as: Aluminum. Zinc. Brass. Copper.

### Hazardous Polymerization

Will not occur.

### Thermal Decomposition

Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Chlorinated pyridine. Hydrogen chloride. Nitrogen oxides.

## 11. Toxicological Information

### Acute Toxicity

**Ingestion**

As product: LD50, Rat, male and female > 5,000 mg/kg

**Dermal**

As product: LD50, Rabbit > 5,000 mg/kg

**Inhalation**

As product: LC50, 4 h, Aerosol, Rat, male and female > 3.0 mg/l

Maximum attainable concentration. No deaths occurred at this concentration.

### Eye damage/eye irritation

May cause mild eye discomfort. May cause eye irritation. May cause slight temporary corneal injury. Mist may cause eye irritation. Vapor may cause eye irritation experienced as mild discomfort and redness.

### Skin corrosion/irritation

Prolonged contact may cause slight skin irritation with local redness.

### Sensitization

**Skin**

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

**Respiratory**

No relevant information found.

### Repeated Dose Toxicity

For the active ingredient(s): Based on available data, repeated exposures are not expected to cause significant adverse effects except at very high aerosol concentrations. Repeated excessive aerosol exposures may cause respiratory tract irritation and even death. Based on information for component(s): In animals, effects have been reported on the following organs: Liver. Kidney.

### Chronic Toxicity and Carcinogenicity

Similar formulations did not cause cancer in laboratory animals.

### Developmental Toxicity

For similar active ingredient(s). Clopyralid caused birth defects in test animals, but only at greatly exaggerated doses that were severely toxic to the mothers. No birth defects were observed in animals given clopyralid at doses several times greater than those expected during normal exposure. Based on information for component(s): Isopropanol has been toxic to the fetus in laboratory animals at doses toxic to the mother.

### Reproductive Toxicity

In animal studies, active ingredient did not interfere with reproduction.

### Genetic Toxicology

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

## 12. Ecological Information

**ENVIRONMENTAL FATE**

Data for Component: **Clopyralid monoethanolamine salt**

### Movement & Partitioning

For similar active ingredient(s). Clopyralid. Bioconcentration potential is low (BCF less than 100 or log Pow less than 3). Potential for mobility in soil is very high (Koc between 0 and 50).

### Persistence and Degradability

For similar active ingredient(s). Clopyralid. Biodegradation under aerobic laboratory conditions is below detectable limits (BOD20 or BOD28/ThOD < 2.5%).

Data for Component: **Isopropanol**

### Movement & Partitioning

Bioconcentration potential is low (BCF less than 100 or log Pow less than 3). Potential for mobility in soil is very high (Koc between 0 and 50).
**Henry's Law Constant (H):** 3.38E-06 - 8.07E-06 atm*m3/mole; 25 °C Estimated.
**Partition coefficient, n-octanol/water (log Pow):** 0.05 Measured
**Partition coefficient, soil organic carbon/water (Koc):** 1.1 Estimated.

### Persistence and Degradability

Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.
**Indirect Photodegradation with OH Radicals**

| Rate Constant | Atmospheric Half-life | Method |
|---|---|---|
| 7.26E-12 cm3/s | 1.472 d | Estimated. |

**OECD Biodegradation Tests:**

| Biodegradation | Exposure Time | Method | 10 Day Window |
|---|---|---|---|
| 95 % | 21 d | OECD 301E Test | pass |

**Biological oxygen demand (BOD):**

| BOD 5 | BOD 10 | BOD 20 | BOD 28 |
|---|---|---|---|
| 20 - 72 % | | 78 - 86 % | |

**Chemical Oxygen Demand:** 2.09 mg/mg
**Theoretical Oxygen Demand:** 2.40 mg/mg

Data for Component: **Ethylene oxide, propylene oxide and di-sec-butylphenol polymer**

### Movement & Partitioning

No bioconcentration is expected because of the relatively high water solubility. May foam in water.

### Persistence and Degradability

Biodegradation under aerobic laboratory conditions is below detectable limits (BOD20 or BOD28/ThOD < 2.5%).
**Chemical Oxygen Demand:** 1.78 mg/mg
**Theoretical Oxygen Demand:** 2.35 mg/mg

## ECOTOXICITY

Data for Component: **Clopyralid monoethanolamine salt**

Material is practically non-toxic to fish on an acute basis (LC50 > 100 mg/L). Material is practically non-toxic to aquatic invertebrates on an acute basis (LC50/EC50 > 100 mg/L). Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested). Material is slightly toxic to birds on an acute basis (LD50 between 501 and 2000 mg/kg). Material is practically non-toxic to birds on a dietary basis (LC50 > 5000 ppm).

**Fish Acute & Prolonged Toxicity**
LC50, bluegill (Lepomis macrochirus), static, 96 h: 125 - 4,686 mg/l
**Aquatic Invertebrate Acute Toxicity**
EC50, water flea Daphnia magna, static, 48 h, immobilization: 225 - 1,133 mg/l
**Aquatic Plant Toxicity**
EbC50, green alga Pseudokirchneriella subcapitata (formerly known as Selenastrum capricornutum), static, 96 h: 6.9 mg/l
**Toxicity to Above Ground Organisms**
oral LD50, mallard (Anas platyrhynchos): 1465 - 2000 mg/kg bodyweight.
dietary LC50, bobwhite (Colinus virginianus): > 5620 mg/kg diet.
contact LD50, Honey bee (Apis mellifera): > 100 micrograms/bee
oral LD50, Honey bee (Apis mellifera): > 100 micrograms/bee

Data for Component: **Isopropanol**

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

**Fish Acute & Prolonged Toxicity**
LC50, fathead minnow (Pimephales promelas), flow-through test, 96 h: 9,640 mg/l

**Aquatic Invertebrate Acute Toxicity**
LC50, water flea Daphnia magna, static, 24 h, immobilization: 24 mg/l
**Aquatic Plant Toxicity**
EC50, alga Scenedesmus sp., Growth rate inhibition, 72 h: > 1,000 mg/l
**Toxicity to Micro-organisms**
EC50; activated sludge: > 1,000 mg/l

Data for Component: **Ethylene oxide, propylene oxide and di-sec-butylphenol polymer**
Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

**Fish Acute & Prolonged Toxicity**
LC50, bluegill (Lepomis macrochirus), static, 96 h: 4.8 mg/l
LC50, rainbow trout (Oncorhynchus mykiss), static, 96 h: 3.7 mg/l
**Aquatic Invertebrate Acute Toxicity**
LC50, water flea Daphnia magna, 48 h: 10.5 mg/l
**Toxicity to Above Ground Organisms**
dietary LC50, Honey bee (Apis mellifera): > 105 micrograms/bee
contact LD50, Honey bee (Apis mellifera): > 100 micrograms/bee
No Observed Effects Level (NOEL), bobwhite (Colinus virginianus): 2,250 mg/kg
oral LD50, bobwhite (Colinus virginianus): > 2,250 mg/kg

## 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

**DOT Non-Bulk**
NOT REGULATED

**DOT Bulk**
**Proper Shipping Name:** COMBUSTIBLE LIQUID, N.O.S.
**Technical Name:** CONTAINS ISOPROPANOL
**Hazard Class:** COMBUSTIBLE LIQUID **ID Number:** NA1993 **Packing Group:** PG III

**IMDG**
**Proper Shipping Name:** FLAMMABLE LIQUID, N.O.S.
**Technical Name:** CONTAINS ISOPROPANOL
**Hazard Class:** 3 **ID Number:** UN1993 **Packing Group:** PG III
**EMS Number:** F-E,S-E

**ICAO/IATA**
**Proper Shipping Name:** FLAMMABLE LIQUID, N.O.S.
**Technical Name:** CONTAINS ISOPROPANOL
**Hazard Class:** 3 **ID Number:** UN1993 **Packing Group:** PG III
**Cargo Packing Instruction:** 310
**Passenger Packing Instruction:** 309

*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

### OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

| | |
|---|---|
| **Immediate (Acute) Health Hazard** | Yes |
| **Delayed (Chronic) Health Hazard** | Yes |
| **Fire Hazard** | Yes |
| **Reactive Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |

### Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This product contains the following substances which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and which are listed in 40 CFR 372.

| Component | CAS # | Amount |
|---|---|---|
| Isopropanol | 67-63-0 | 5.0% |

### Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:

The following product components are cited in the Pennsylvania Hazardous Substance List and/or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

| Component | CAS # | Amount |
|---|---|---|
| Isopropanol | 67-63-0 | 5.0% |

### Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List:

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

### Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

### California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

### Toxic Substances Control Act (TSCA)

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

## 16. Other Information

## Hazard Rating System

| NFPA | Health | Fire | Reactivity |
|---|---|---|---|
| | 2 | 2 | 1 |

## Revision

Identification Number: 50397 / 1016 / Issue Date 10/29/2010 / Version: 4.0
DAS Code: XRM-3972
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 |
| Action Level | A value set by OSHA that is lower than the PEL which will trigger the need for activities such as exposure monitoring and medical surveillance if exceeded. |

*Dow AgroSciences LLC 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.*