# SAFETY DATA SHEET

#### Product name: Tenkoz Trifluralin 4 Emulsifiable Concentrate

Issue Date: 05/04/2015 Print Date: 05/11/2015

Tenkoz Inc. 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**

**Product name:** Tenkoz Trifluralin 4 Emulsifiable Concentrate

Recommended use of the chemical and restrictions on use Identified uses: End use herbicide product

#### COMPANY IDENTIFICATION

Tenkoz, Inc. 1725 Windward Concourse, Suite 410 Alpharetta, GA 30005 UNITED STATES

**Customer Information Number:** 

#### EMERGENCY TELEPHONE NUMBER 24-Hour Emergency Contact: 800-992-5994

# 2. HAZARDS IDENTIFICATION

#### Hazard classification

This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200. Eye irritation - Category 2A Skin sensitisation - Category 1 Carcinogenicity - Category 2 Aspiration hazard - Category 1

#### Label elements Hazard pictograms



Signal word: DANGER!

### Hazards

May be fatal if swallowed and enters airways. May cause an allergic skin reaction. Causes serious eye irritation. Suspected of causing cancer.

# **Precautionary statements**

### Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear eye protection/ face protection. Wear protective gloves. Use personal protective equipment as required.

## Response

IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/ attention. Do NOT induce vomiting. If skin irritation or rash occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Wash contaminated clothing before reuse.

#### Storage

Store locked up.

# Disposal

Dispose of contents/ container to an approved waste disposal plant.

#### Other hazards

no data available

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

| This product is a mixture.<br>Component | CASRN         | Concentration |
|---|---------------|---------------|
| <b>T</b> 10                             |               | 40.00%        |
| Trifluralin                             | 1582-09-8     | 43.0%         |
| Naphthalene                             | 91-20-3       | 7.0%          |
| Balance                                 | Not available | 50.0%         |

# 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. If breathing is difficult, oxygen should be administered by qualified personnel.

**Skin contact:** Take off contaminated clothing. Wash skin with soap and plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Wash clothing before reuse. Shoes and other leather items which cannot be decontaminated should be disposed of properly.

**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:** Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not 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), any additional important symptoms and effects are described in Section 11: Toxicology Information.

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

**Notes to physician:** Skin contact may aggravate preexisting dermatitis. Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury. The decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. 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. FIREFIGHTING MEASURES

**Suitable extinguishing media:** Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

Unsuitable extinguishing media: Do not use direct water stream. May spread fire.

#### 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: Nitrogen oxides. Fluorinated hydrocarbons. Carbon monoxide. Carbon dioxide.

**Unusual Fire and Explosion Hazards:** Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Dense smoke is produced when product burns.

# Advice for firefighters

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Consider feasibility of a controlled burn to minimize environment damage. Foam fire extinguishing system is preferred because uncontrolled water can spread possible contamination. 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. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. 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 personnel out of low areas. 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: 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.

# 7. HANDLING AND STORAGE

**Precautions for safe handling:** Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Do not swallow. Keep out of reach of children. Avoid breathing vapor or mist. Use with adequate ventilation. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

**Conditions for safe storage:** 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

# **Control parameters**

Exposure limits are listed below, if they exist.

| Component   | Regulation | Type of listing | Value/Notation    |
|-------------|------------|-----------------|-------------------|
| Naphthalene | Dow IHG    | TWA             | 10 ppm            |
|             | Dow IHG    | TWA             | Absorbed via skin |
|             | Dow IHG    | STEL            | 15 ppm            |
|             | Dow IHG    | STEL            | Absorbed via skin |
|             | ACGIH      | TWA             | 10 ppm            |
|             | ACGIH      | TWA             | Absorbed via skin |
|             | OSHA Z-1   | TWA             | 50 mg/m3 10 ppm   |

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.

# Exposure controls

**Engineering controls:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

#### Individual protection measures

**Eye/face protection:** Use chemical goggles. If exposure causes eye discomfort, use a full-face respirator.

# Skin protection

**Hand protection:** Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Chlorinated polyethylene. Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl chloride ("PVC" or "vinyl"). Viton. Examples of acceptable glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Avoid gloves made of: Polyvinyl alcohol ("PVA"). 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.

**Other protection:** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse or dispose of properly. Items which cannot be decontaminated, such as shoes, belts and watchbands, should be removed and disposed of properly.

**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, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance                                 |  |
|--|--|
| Physical state                             | Liquid.  |
| Color                                      | Orange   |
| Odor                                       | Solvent  |
| Odor Threshold                             | no data available  |
| рН   | 5.0 <i>Literature</i> (aqueous 50/50)                            |
| Melting point/range                        | No test data available   |
| Freezing point                             | No test data available   |
| Boiling point (760 mmHg)                   | 232 - 275 °C (450 - 527 °F) <i>Literature</i> Solvent            |
| Flash point                                | closed cup 99 °C (210 °F) Pensky-Martens Closed Cup<br>ASTM D 93 |
| Evaporation Rate (Butyl Acetate = 1)       | no data available  |
| Flammability (solid, gas)                  | Not Applicable   |
| Lower explosion limit                      | 1.8 % vol Estimated. Solvent                                     |
| Upper explosion limit                      | 11.8 % vol Estimated. Solvent                                    |
| Vapor Pressure                             | < 1 hPa at 20 °C (68 °F) Literature Solvent                      |
| Relative Vapor Density (air = 1)           | 4.7 Literature (solvent, relative to air)                        |
| Relative Density (water = 1)               | 1.117 at 20 °C (68 °F) Literature                                |
| Water solubility                           | emulsifies in water  |
| Partition coefficient: n-<br>octanol/water | no data available  |
| Auto-ignition temperature                  | No test data available   |
| Decomposition temperature                  | No test data available   |
| Kinematic Viscosity                        | no data available  |
| Explosive properties                       | no data available  |
| Oxidizing properties                       | no data available  |
| Liquid Density                             | 1.117 g/cm3 <i>Literature</i>                                    |
| Molecular weight                           | no data available  |

NOTE: The physical data presented above are typical values and should not be construed as a specification.

# **10. STABILITY AND REACTIVITY**

Reactivity: no data available

Chemical stability: Unstable at elevated temperatures.

Possibility of hazardous reactions: Polymerization will not occur.

**Conditions to avoid:** Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems. Pressure build-up can be rapid. Avoid static discharge.

Incompatible materials: Avoid contact with: Oxidizers.

**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. Fluorinated hydrocarbons. Hydrogen fluoride. Nitrogen oxides. Toxic flammable gases can be released during decomposition.

# **11. TOXICOLOGICAL INFORMATION**

Toxicological information on this product or its components appear in this section when such data is available.

## Acute toxicity

## Acute oral toxicity

Low 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 injury.

LD50, Rat, male, > 5,000 mg/kg LD50, Rat, female, 4,013 mg/kg

# Acute dermal toxicity

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

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

# Acute inhalation toxicity

No adverse effects are anticipated from single exposure to mist.

LC50, Rat, male and female, 4 Hour, Mist, > 7.74 mg/l

#### Skin corrosion/irritation

Brief contact may cause slight skin irritation with local redness. Prolonged contact may cause skin irritation with local redness. May cause drying and flaking of the skin.

# Serious eye damage/eye irritation

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

#### Sensitization

For the active ingredient(s): Skin contact may cause an allergic skin reaction.

For respiratory sensitization: No relevant data found.

## Specific Target Organ Systemic Toxicity (Single Exposure)

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

#### Specific Target Organ Systemic Toxicity (Repeated Exposure)

For the active ingredient(s): In animals, effects have been reported on the following organs: Liver. Kidney. Blood. For the solvent(s): Lung. Gastrointestinal tract. Thyroid. Urinary tract. Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use. For the major component(s): Naphthalene. Observations in animals include: Respiratory effects. Cataracts and other eye effects have been reported in humans repeatedly exposed to naphthalene vapor or dust. Ingestion of naphthalene by humans has caused hemolytic anemia. Excessive exposure may cause hemolysis, thereby impairing the blood's ability to transport oxygen.

#### Carcinogenicity

For the active ingredient(s): A low incidence of urinary tract tumors was seen in only 1 of 5 chronic studies in rats with trifluralin. Trifluralin is not anticipated to be a carcinogenic risk to man. For the major component(s): Naphthalene. Has caused cancer in some laboratory animals. In humans, there is limited evidence of cancer in workers involved in naphthalene production. Limited oral studies in rats were negative.

#### Teratogenicity

For the active ingredient(s): Trifluralin. Has been toxic to the fetus in laboratory animals at doses toxic to the mother. For the solvent(s): For the major component(s): Did not cause birth defects in laboratory animals.

#### **Reproductive toxicity**

For the active ingredient(s): Trifluralin. In animal studies, did not interfere with reproduction.

#### **Mutagenicity**

For the active ingredient(s): Trifluralin. In vitro genetic toxicity studies were predominantly negative. For the solvent(s): In vitro genetic toxicity studies were negative. For the major component(s): In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were predominantly negative. Animal genetic toxicity studies were negative.

#### **Aspiration Hazard**

Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

| Carcinogenicity |      |
|-----------------|------|
| Component       | List |
| Naphthalene     | IARC |

Classification Group 2B: Possibly carcinogenic to US NTP

ACGIH

humans Reasonably anticipated to be a human carcinogen A3: Confirmed animal carcinogen with unknown relevance to humans.

# **12. ECOLOGICAL INFORMATION**

Ecotoxicological information on this product or its components appear in this section when such data is available.

# Toxicity

## **Trifluralin**

#### Acute toxicity to fish

Material is very highly toxic to aquatic organisms on an acute basis (LC50/EC50 <0.1 mg/L in the most sensitive species).

LC50, Oncorhynchus mykiss (rainbow trout), flow-through test, 96 Hour, 0.088 mg/l LC50, Lepomis macrochirus (Bluegill sunfish), flow-through test, 96 Hour, 0.089 mg/l

#### Acute toxicity to aquatic invertebrates

EC50, water flea Daphnia magna, static test, 48 Hour, 0.245 mg/l EC50, mussel Mytilus edulis, static test, 48 Hour, 0.096 mg/l

## Acute toxicity to algae/aquatic plants

ErC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, 0.0532 mg/l EC50, Lemna gibba, Growth inhibition, 7 d, 0.043 mg/l EbC50, diatom Navicula sp., 5 d, Biomass, 0.015 mg/l

#### Toxicity to bacteria

EC50, activated sludge, 3 Hour, > 100 mg/l

#### Chronic toxicity to fish

NOEC, Oncorhynchus mykiss (rainbow trout), static test, 48 d, growth, 0.00114 mg/l

#### Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), semi-static test, 21 d, growth, 0.0507 mg/l

#### **Toxicity to Above Ground Organisms**

Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg). Material is practically non-toxic to birds on a dietary basis (LC50 > 5000 ppm). oral LD50, Colinus virginianus (Bobwhite quail), > 2250mg/kg bodyweight. dietary LC50, Colinus virginianus (Bobwhite quail), 5 d, > 5000mg/kg diet. oral LD50, Apis mellifera (bees), > 100micrograms/bee contact LD50, Apis mellifera (bees), > 100micrograms/bee

#### Toxicity to soil-dwelling organisms

LC50, Eisenia fetida (earthworms), 14 d, > 1,000 mg/kg

#### Naphthalene

Acute toxicity to fish

Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested). LC50, Oncorhynchus mykiss (rainbow trout), 96 Hour, 0.11 mg/l

### Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), static test, 48 Hour, 1.6 - 24.1 mg/l

## Chronic toxicity to fish

NOEC, Other, flow-through, 40 d, mortality, 0.37 mg/l

#### **Balance**

Acute toxicity to fish No relevant data found.

#### Persistence and degradability

#### **Trifluralin**

Biodegradability: Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.
10-day Window: Fail
Biodegradation: 5 %
Exposure time: 28 d
Method: OECD Test Guideline 301B or Equivalent

Chemical Oxygen Demand: 1.37 mg/mg

#### Stability in Water (1/2-life)

Hydrolysis, half-life, > 1 year, pH 3 - 9, Measured Photolysis, half-life, 0.19 - 3.08 Hour, Measured

#### Photodegradation

Test Type: Half-life (indirect photolysis) Sensitizer: OH radicals Atmospheric half-life: 5.347 Hour Method: Estimated.

#### Naphthalene

**Biodegradability:** Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD > 40%).

Theoretical Oxygen Demand: 3.00 mg/mg

#### **Biological oxygen demand (BOD)**

| Incubation<br>Time | BOD      |
|--------------------|----------|
| 5 d                | 57.000 % |
| 10 d               | 71.000 % |
| 20 d               | 71.000 % |

#### Photodegradation

**Test Type:** Half-life (indirect photolysis) **Sensitizer:** OH radicals **Atmospheric half-life:** 5.9 Hour Method: Estimated.

# **Balance**

Biodegradability: No relevant data found.

# **Bioaccumulative potential**

## **Trifluralin**

**Bioaccumulation:** Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and 7).

Partition coefficient: n-octanol/water(log Pow): 5.27 Bioconcentration factor (BCF): 1,060 - 6,000 Pimephales promelas (fathead minnow) Estimated.

## Naphthalene

**Bioaccumulation:** Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5). **Partition coefficient:** n-octanol/water(log Pow): 3.3 Measured

Bioconcentration factor (BCF): 40 - 300 Fish. 28 d Measured

## **Balance**

Bioaccumulation: No relevant data found.

## Mobility in soil

## **Naphthalene**

Potential for mobility in soil is medium (Koc between 150 and 500). **Partition coefficient(Koc):** 240 - 1300 Measured

#### **Balance**

No relevant data found.

# **13. DISPOSAL CONSIDERATIONS**

**Disposal methods:** 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

Proper shipping name

DOT

UN number Class Environmentally hazardous substance, liquid, n.o.s.(Trifluralin, Naphthalene) UN 3082 9

| Packing group       | III                      |
|---------------------|--------------------------|
| Reportable Quantity | Trifluralin, Naphthalene |

# Classification for SEA transport (IMO-IMDG):

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Trifluralin, Naphthalene) **UN number** UN 3082 Class 9 Packing group Ш Marine pollutant Trifluralin, Naphthalene Transport in bulk Consult IMO regulations before transporting ocean bulk according to Annex I or II of MARPOL 73/78 and the **IBC or IGC Code** 

## Classification for AIR transport (IATA/ICAO):

| Proper shipping name | Environmentally hazardous substance, liquid, n.o.s.(Trifluralin, |
|----------------------|--|
|                      | Naphthalene)   |
| UN number            | UN 3082  |
| Class                | 9  |
| Packing group        | III  |
|                      |  |

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. 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 Acute Health Hazard Chronic Health Hazard

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and<br/>Community Right-to-Know Act of 1986) Section 313ComponentsCASRN<br/>91-20-3

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

WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

# Pennsylvania (Worker and Community Right-To-KnowAct): 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.

| Components  | CASRN     |
|-------------|-----------|
| Trifluralin | 1582-09-8 |
| Naphthalene | 91-20-3   |

# Pennsylvania (Worker and Community Right-To-KnowAct): 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.

## United States TSCA Inventory (TSCA)

This product contains chemical substance(s) exempt from U.S. EPA TSCA Inventory requirements. It is regulated as a pesticide subject to Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requirements.

## Federal Insecticide, Fungicide and Rodenticide Act

EPA Registration Number: 62719-250-55467

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

#### CAUTION

Causes moderate eye irritation Harmful if swallowed Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

# **16. OTHER INFORMATION**

# Hazard Rating System

NFPA

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

#### Revision

Identification Number: 101189294 / A211 / Issue Date: 05/04/2015 / Version: 6.0 DAS Code: GF-1239

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

#### Legend

| Absorbed via skin | Absorbed via skin                       |
|-------------------|---|
| ACGIH             | USA. ACGIH Threshold Limit Values (TLV) |

| Dow IHG  | Dow Industrial Hygiene Guideline                                    |
|----------|---|
| OSHA Z-1 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air |
|          | Contaminants  |
| STEL     | Short term exposure limit   |
| TWA      | Time weighted average   |

# Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within Dow AgroSciences LLC.

Tenkoz Inc. 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.