

SAFETY DATA SHEET

THE DOW CHEMICAL COMPANY

Product name: AQUCAR™ DB 5 Water Treatment Microbiocide Issue Date: 03/24/2015

Print Date: 03/24/2015

THE DOW CHEMICAL COMPANY 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

UNITED STATES

Product name: AQUCAR™ DB 5 Water Treatment Microbiocide

Recommended use of the chemical and restrictions on use Identified uses:

COMPANY IDENTIFICATION

THE DOW CHEMICAL COMPANY
2030 WILLARD H DOW CENTER

MIDLAND MI 48674-0000

Customer Information Number: 800-258-2436

SDSQuestion@dow.com

EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: 800-424-9300 **Local Emergency Contact:** 989-636-4400

2. HAZARDS IDENTIFICATION

Hazard classification

This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

Skin corrosion - Category 1
Serious eye damage - Category 1
Skin sensitisation - Category 1

Label elements Hazard pictograms





Signal word: DANGER!

Hazards

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Causes serious eye damage.

Precautionary statements

Prevention

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 protective gloves/ protective clothing/ eye protection/ face protection.

Response

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

If skin irritation or rash occurs: 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

Chemical nature: - Product type 12: Slimicide

This product is a mixture.

Component	CASRN	Concentration
2,2-Dibromo-3-nitrilopropionamide	10222-01-2	5.0%
Polyethylene glycol	25322-68-3	>= 50.0 - <= 75.0 %
Sodium bromide	7647-15-6	<= 1.5 %
Dibromoacetonitrile	3252-43-5	<= 0.5 %

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4. FIRST AID MEASURES

Description of first aid measures

General advice: 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.

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. 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. Suitable emergency safety shower facility should be available in work area.

Eye contact: Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.

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), 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: Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist. If burn is present, treat as any thermal burn, after decontamination. 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: To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

Unsuitable extinguishing media: Do not use direct water stream.

Special hazards arising from the substance or mixture

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 bromide. Carbon monoxide. Carbon dioxide.

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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.

Advice for firefighters

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Evacuate area. Keep upwind of spill. Only trained and properly protected personnel must be involved in clean-up operations. Ventilate area of leak or spill. Refer to section 7, Handling, for additional precautionary measures. 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. Spills or discharge to natural waterways is likely to kill aquatic organisms.

Methods and materials for containment and cleaning up: Contain spilled material if possible. Attempt to neutralize by adding materials such as Sodium bisulphite. Sodium metabisulfite. Neutralize with approximately 4.3 grams sodium bisulfite (NaHSO3) or 4.0 g sodium meta bisulphite (Na2S2O5) for every 100 grams biocidal product. Absorb with materials such as: Dirt. Sand. Vermiculite. Zorb-all®. Hazorb®. Collect in suitable and properly labeled containers. See Section 13. Disposal Considerations, for additional information.

7. HANDLING AND STORAGE

Precautions for safe handling: Keep out of reach of children. Do not get in eyes, on skin, on clothing. Avoid breathing mist. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Keep container closed. Use with adequate ventilation. Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Conditions for safe storage: Store in original container. Keep container tightly closed. Do not store in: Aluminum. Brass. Copper. Copper alloys. Mild steel. Stainless steel.

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Storage stability

Shelf life: Use within 12 Month

Storage temperature: <= 35 °C (<= 95 °F)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value/Notation
2,2-Dibromo-3-	Dow IHG	С	2 mg/m3
nitrilopropionamide			
Polyethylene glycol	US WEEL	TWA aerosol	10 mg/m3
Sodium bromide	Dow IHG	TWA	6 mg/m3
Dibromoacetonitrile	Dow IHG	С	0.1 ppm
	Dow IHG	С	Absorbed via skin

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.

Skin protection

Hand protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl chloride ("PVC" or "vinyl"). 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.

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. In misty atmospheres, use an approved particulate respirator. The following should be effective types of air-purifying respirators: Particulate filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state Liquid.

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Color Colorless to yellow

Odor Mild

Odor Threshold

PH

1.5 - 5 ASTM E70

Melting point/range

Not applicable

Freezing point No test data available

Boiling point (760 mmHg) > 70 °C (> 158 °F) *Literature* Decomposes **Flash point** closed cup 182 °C (360 °F) *Literature*

Evaporation Rate (Butyl Acetate

= 1)

No test data available

Flammability (solid, gas)

Lower explosion limit

No test data available

Upper explosion limit

No test data available

Vapor Pressure 20 hPa at 25 °C (77 °F) Literature

Relative Vapor Density (air = 1) No test data available

Relative Density (water = 1) 1.134 at 25 °C (77 °F) *Literature*Water solubility 30 % at 20 °C (68 °F) *Literature*

Partition coefficient: n- no data available

octanol/water

Auto-ignition temperatureNo test data availableDecomposition temperatureNo test data available

Dynamic Viscosity 76 cP at 25 °C (77 °F) (Brookfield Viscosity - @ 100 rpm, #3

spindle)

Kinematic Viscosity 67.02 cSt at 25 °C (77 °F) *Calculated.*

Explosive properties no data available

Oxidizing properties no data available

Bulk density 9.0 - 9.7 kg/m3 *Literature* **Molecular weight** No test data available

Particle size Not determined

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: Avoid temperatures above 70°C (158°F) Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems.

Incompatible materials: Avoid contact with oxidizing materials. Avoid contact with: Strong bases. Avoid contact with metals such as: Aluminum.

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. Bromine. Cyanogen bromide. Dibromoacetonitrile. Toxic gases are 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, 3,115 mg/kg

Acute dermal toxicity

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

LD50, Rabbit, > 2,000 mg/kg No deaths occurred at this concentration.

Acute inhalation toxicity

Mist may cause irritation of upper respiratory tract (nose and throat). For narcotic effects: No specific, relevant data available for assessment.

As product: The LC50 has not been determined.

Skin corrosion/irritation

Brief contact may cause skin burns. Symptoms may include pain, severe local redness and tissue damage.

Serious eye damage/eye irritation

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

Sensitization

Has caused allergic skin reactions when tested in guinea pigs.

For similar material(s):

Did not cause allergic skin reactions when tested in humans.

For respiratory sensitization:

No specific, relevant data available for assessment.

Specific Target Organ Systemic Toxicity (Single Exposure)

Material is corrosive. Material is not classified as a respiratory irritant; however, upper respiratory tract irritation or corrosivity may be expected.

Specific Target Organ Systemic Toxicity (Repeated Exposure)

Excessive exposure may increase the blood and tissue levels of bromine.

Observations in animals include kidney effects following repeated ingestion of active ingredient, but no evidence of systemic toxicity following repeated dermal exposure at maximum attainable doses

Carcinogenicity

Active ingredient did not cause cancer in laboratory animals. There is evidence that dibromoacetonitrile (DBAN), a possible degradation product of 2,2-dibromo-3-nitrilopropionamide (DBNPA), can produce cancer in laboratory animals. However, the relevance of this to humans is unknown.

Teratogenicity

Bromism has been reported in offspring of mothers who also had bromide poisoning as a result of ingestion of bromides during pregnancy. For the active ingredient(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Contains component(s) which did not cause birth defects in laboratory animals.

Reproductive toxicity

For the minor component(s): In animal studies, has been shown to interfere with fertility. In animal studies, active ingredient did not interfere with reproduction. For the major component(s): In animal studies, did not interfere with reproduction.

Mutagenicity

In vitro genetic toxicity studies were negative for component(s) tested. Genetic toxicity studies in animals were negative for component(s) tested.

Aspiration Hazard

Based on physical properties, not likely to be an aspiration hazard.

COMPONENTS INFLUENCING TOXICOLOGY:

2,2-Dibromo-3-nitrilopropionamide

Acute inhalation toxicity

LC50, Rat, female, 4 Hour, dust/mist, 0.24 mg/l

LC50, Rat, male, 4 Hour, dust/mist, 0.31 mg/l

Polyethylene glycol

Acute inhalation toxicity

LC50, Rat, 6 Hour, Aerosol, > 2.5 mg/l No deaths occurred at this concentration.

Sodium bromide

Acute inhalation toxicity

The LC50 has not been determined.

Dibromoacetonitrile

Acute inhalation toxicity

The LC50 has not been determined.

Carcinogenicity

Component List Classification

Dibromoacetonitrile IARC Group 2B: Possibly carcinogenic to

humans

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12. ECOLOGICAL INFORMATION

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

Toxicity

2,2-Dibromo-3-nitrilopropionamide

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, 1 mg/l

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 48 Hour, 0.60 mg/l

Acute toxicity to algae/aquatic plants

EbC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, Biomass, 0.30 mg/l ErC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, Growth rate inhibition, 0.50 mg/l

Toxicity to bacteria

EC50, activated sludge, 3.1 mg/l

EC50, activated sludge, Respiration inhibition, 3 Hour, 8.2 mg/l

Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), flow-through test, 21 d, 0.25 mg/l

Toxicity to Above Ground Organisms

Material is practically non-toxic to birds on a dietary basis (LC50 > 5000 ppm). dietary LC50, Colinus virginianus (Bobwhite quail), > 10,000 ppm dietary LC50, Anas platyrhynchos (Mallard duck), > 10,000 ppm

Polyethylene glycol

Acute toxicity to fish

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). LC50, Pimephales promelas (fathead minnow), static test, 96 Hour, > 10,000 mg/l, OECD Test Guideline 203 or Equivalent

Acute toxicity to aquatic invertebrates

LC50, Daphnia magna (Water flea), 48 Hour, > 10,000 mg/l

Sodium bromide

Acute toxicity to fish

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). LC50, Pimephales promelas (fathead minnow), static test, 16,479 mg/l, OECD Test Guideline 203 or Equivalent

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), static test, 24 Hour, 9,313 mg/l, OECD Test Guideline 202 or Equivalent

Acute toxicity to algae/aquatic plants

EC50, alga Scenedesmus sp., static test, 96 Hour, Biomass, 6,000 mg/l, OECD Test Guideline 201 or Equivalent

Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), static test, 21 d, growth, 117 mg/l

Dibromoacetonitrile

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, Pimephales promelas (fathead minnow), 96 Hour, 0.55 mg/l

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), semi-static test, 48 Hour, 0.24 mg/l

Acute toxicity to algae/aquatic plants

ErC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, Growth rate inhibition, 0.167 mg/l

NOEC, Pseudokirchneriella subcapitata (green algae), 72 Hour, 0.056 mg/l

Persistence and degradability

2,2-Dibromo-3-nitrilopropionamide

Biodegradability: Abiotic degradation: The material is rapidly degradable by abiotic means.

10-day Window: Fail

Biodegradation: 35 - 78 % **Exposure time:** 28 d

Method: OECD Test Guideline 301B or Equivalent

10-day Window: Not applicable **Biodegradation:** 83.3 % **Exposure time:** 28 d

Method: OECD Test Guideline 303A or Equivalent

10-day Window: Not applicable **Biodegradation:** 17 - 22 % **Exposure time:** 28 d

Method: OECD Test Guideline 306 or Equivalent

Theoretical Oxygen Demand: 0.59 mg/mg

Chemical Oxygen Demand: 0.26 mg/mg

Stability in Water (1/2-life)

Hydrolysis, half-life, 65 hrs, pH 7

Photodegradation

Test Type: Half-life (indirect photolysis)

Sensitizer: OH radicals **Atmospheric half-life:** 5.3 d

Method: Estimated.

Polyethylene glycol

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready

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biodegradability. 10-day Window: Pass **Biodegradation:** 85 % **Exposure time:** 28 d

Method: OECD Test Guideline 301F or Equivalent

Theoretical Oxygen Demand: 1.67 mg/mg

Sodium bromide

Biodegradability: Biodegradation is not applicable.

Dibromoacetonitrile

Biodegradability: No relevant data found.

Theoretical Oxygen Demand: 0.48 mg/mg

Bioaccumulative potential

2,2-Dibromo-3-nitrilopropionamide

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

Partition coefficient: n-octanol/water(log Pow): 0.79 Measured

Bioconcentration factor (BCF): 13 Fish. Measured

Polyethylene glycol

Bioaccumulation: No relevant data found.

Sodium bromide

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

Bioconcentration factor (BCF): < 40 Fish. Measured

Dibromoacetonitrile

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

Partition coefficient: n-octanol/water(log Pow): 1.56 Measured

Mobility in soil

2,2-Dibromo-3-nitrilopropionamide

Potential for mobility in soil is very high (Koc between 0 and 50).

Partition coefficient(Koc): 15 Estimated.

Polyethylene glycol

No relevant data found.

Sodium bromide

No relevant data found.

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Dibromoacetonitrile

Potential for mobility in soil is very high (Koc between 0 and 50).

Partition coefficient(Koc): 13 Estimated.

13. DISPOSAL CONSIDERATIONS

Disposal methods: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device.

14. TRANSPORT INFORMATION

DOT

Proper shipping name Corrosive liquid, acidic, organic, n.o.s.(2,2-Dibromo-3-

nitrilopropionamide)

UN number UN 3265

Class 8
Packing group III

Classification for SEA transport (IMO-IMDG):

Proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.(2,2-

Dibromo-3-nitrilopropionamide)

UN number UN 3265

Class 8
Packing group III
Marine pollutant No

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 Corrosive liquid, acidic, organic, n.o.s.(2,2-Dibromo-3-

nitrilopropionamide)

UN number UN 3265

Class 8
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

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

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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.

Pennsylvania Worker and Community Right-To-Know Act:

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 knownto the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the 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: 464-496

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:

DANGER

Corrosive

Causes irreversible eye damage May be fatal if swallowed.

Causes skin irritation

Harmful if inhaled or absorbed through skin

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

This product is toxic to fish and invertebrates.

16. OTHER INFORMATION

Product Literature

Additional information on this product may be obtained by calling your sales or customer service contact.

Revision

Identification Number: 101273479 / A001 / Issue Date: 03/24/2015 / Version: 0.0 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
С	Ceiling limit
Dow IHG	Dow Industrial Hygiene Guideline
TWA	8-hr TWA
US WEEL	USA. Workplace Environmental Exposure Levels (WEEL)

Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

THE DOW CHEMICAL COMPANY 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.