

# SAFETY DATA SHEET

# DOW AGROSCIENCES (JIANGSU) CO., LTD.

according to GB/T 16483 and GB/T 17519

Product name: DAO YOU™ Herbicide Date of first issue: 27.06.2018

DOW AGROSCIENCES (JIANGSU) CO., LTD. encourages you and expects you to read and understand the entire SDS as there is important information throughout the document. This SDS provides users with information relating to the protection of human health and safety at the workplace, protection of the environment and supports emergency response. Product users and applicators should primarily refer to the product label attached to or accompanying the product container.

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: DAO YOU™ Herbicide

Recommended use of the chemical and restrictions on use

Identified uses: End use herbicide product

**COMPANY IDENTIFICATION** 

DOW AGROSCIENCES (JIANGSU) CO., LTD. RM 2212, 3 NANJING RD, YANGTZE 215633 ZHANGJIAGANG CHINA

Customer Information Number: 86-400-880-5588

SDS@corteva.com

**EMERGENCY TELEPHONE NUMBER** 

**24-Hour Emergency Contact**: 86-532-83889090 **Local Emergency Contact**: 0532-83889090

# 2. HAZARDS IDENTIFICATION

# **Emergency Overview**

Appearance Liquid.

Color Off-white to pink

**Odor** Mild

May cause an allergic skin reaction. Very toxic to aquatic life. Very toxic to aquatic life with

long lasting effects.

#### **GHS Classification**

Classified as hazardous according to regulatory criteria. Skin sensitisation - Sub-category 1B Acute aquatic toxicity - Category 1 Chronic aquatic toxicity - Category 1

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# GHS label elements Hazard pictograms





Signal word: WARNING!

# **Hazard statements**

May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.

# **Precautionary statements**

#### Prevention

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

Contaminated work clothing should not be allowed out of the workplace.

Avoid release to the environment.

Wear protective gloves.

# Response

IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/ attention. Take off contaminated clothing and wash it before reuse. Collect spillage.

# **Disposal**

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

# Physical and chemical hazards

Not classified based on available information.

# **Health hazards**

May cause an allergic skin reaction.

#### **Environmental hazards**

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

#### Other hazards

No data available

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

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Component	CASRN	Concentration
2-chloro-N-(n-butoxymethyl)-N- (2,6-diethylphenyl)acetamide (butachlor)	23184-66-9	38.83%
Penoxsulam	219714-96-2	0.97%
Propylene glycol	57-55-6	4.9%
Refined Linseed Oil	8001-26-1	3.9%
Balance	Not available	51.4%

# 4. FIRST AID MEASURES

# Description of first aid measures Protection of first-aiders:

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.

**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:** No emergency medical treatment necessary.

# 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:** 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

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product container or label with you when calling a poison control center or doctor, or going for treatment.

# 5. FIREFIGHTING MEASURES

#### Extinguishing media

**Suitable extinguishing media:** 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:** 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.

**Unusual Fire and Explosion Hazards:** This material will not burn until the water has evaporated. Residue can burn.

# Advice for firefighters

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Burning liquids may be extinguished by dilution with water. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

**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:** 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. 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.

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# 7. HANDLING AND STORAGE

**Precautions for safe handling:** Keep out of reach of children. Do not swallow. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or mist. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Keep container closed. 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**

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Component	Regulation	Type of listing	Value/Notation
Propylene alycol	US WEEL	TWA	10 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.

# **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 safety glasses (with side shields). **Skin protection** 

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

**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. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator.

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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 Off-white to pink

Odor Mild

**Odor Threshold** No data available

рΗ 4.89 pH Electrode 1% Aqueous solution

Melting point/range Not applicable to liquids

No data available Freezing point Boiling point (760 mmHg) No data available Flash point closed cup >100 °C

**Evaporation Rate (Butyl Acetate** 

= 1)

No data available

Flammability (solid, gas) No data available Lower explosion limit No data available **Upper explosion limit** No data available **Vapor Pressure** No data available **Relative Vapor Density (air = 1)** No data available

1.0315 at 20 °C Pyknometer Relative Density (water = 1)

Water solubility No data available Partition coefficient: n-

octanol/water

No data available

**Autoignition Temperature** No data available **Decomposition temperature** No data available **Kinematic Viscosity** No data available

No **Explosive properties** 

**Oxidizing properties** No significant increase (>5C) in temperature.

**Liquid Density** 1.03 g/ml

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 dangerous reaction known under conditions of normal use.

Chemical stability: Thermally stable at recommended temperatures and pressures.

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Possibility of hazardous reactions: Polymerization will not occur.

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

**Incompatible materials:** Avoid contact with: Zinc compounds. Chlorine. Strong acids. Strong bases. Strong 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. Hydrogen chloride. Nitrogen oxides. Toxic gases are released during decomposition.

### 11. TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such data is available.

#### **Acute toxicity**

# **Acute oral toxicity**

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

As product:

LD50, Rat, female, > 5,000 mg/kg OECD Test Guideline 423

### Acute dermal toxicity

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

As product:

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

# Acute inhalation toxicity

No adverse effects are anticipated from single exposure to mist. Excessive exposure may cause irritation to upper respiratory tract (nose and throat).

LC50, Rat, 4 Hour, dust/mist, > 5.72 mg/l No deaths occurred at this concentration.

### Skin corrosion/irritation

Brief contact is essentially nonirritating to skin.

# Serious eye damage/eye irritation

May cause slight temporary eye irritation.

Corneal injury is unlikely.

#### Sensitization

Has demonstrated the potential for contact allergy in mice.

For respiratory sensitization:

No relevant data found.

# **Specific Target Organ Systemic Toxicity (Single Exposure)**

Available data are inadequate to determine single exposure specific target organ toxicity.

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# Specific Target Organ Systemic Toxicity (Repeated Exposure)

For the active ingredient(s):

In animals, effects have been reported on the following organs:

Blood. Kidnev.

Liver.

Spleen.

# Carcinogenicity

For the active ingredient(s): Has caused cancer in some laboratory animals. Tumors were observed only at levels which produced significant toxicity, thus exceeding the maximum tolerated dose.

# **Teratogenicity**

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

### Reproductive toxicity

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

# Mutagenicity

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

#### **Aspiration Hazard**

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

### 12. ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

# **Ecotoxicity**

# Acute toxicity to fish

As product:

LC50, Rainbow trout (Oncorhynchus mykiss), static test, 96 Hour, 1.9 mg/l, OECD Test Guideline 203

### Acute toxicity to aquatic invertebrates

For similar material(s):

EC50, water flea Daphnia magna, static test, 48 Hour, 16 mg/l, OECD Test Guideline 202

#### Acute toxicity to algae/aquatic plants

For similar material(s):

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

For similar material(s):

ErC50, Pseudokirchneriella subcapitata (green algae), static test, 72 Hour, 0.0033 mg/l, OECD Test Guideline 201

# **Toxicity to Above Ground Organisms**

Based on information for a similar material:

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Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg).

oral LD50, Colinus virginianus (Bobwhite quail), mortality, > 2000mg/kg bodyweight.

oral LD50, Apis mellifera (bees), 48 Hour, mortality, > 222.2µg/bee

contact LD50, Apis mellifera (bees), 48 Hour, mortality, > 200µg/bee

# Toxicity to soil-dwelling organisms

Based on information for a similar material:

LC50, Eisenia andrei (red worm), 14 d, > 1,000 mg/kg

# Persistence and Degradability

### 2-chloro-N-(n-butoxymethyl)-N-(2,6-diethylphenyl)acetamide (butachlor)

Biodegradability: Degradation is expected in the soil environment within months to years.

# **Penoxsulam**

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:** 14.7 % **Exposure time:** 28 d

Method: OECD Test Guideline 301B or Equivalent

**Photodegradation** 

**Sensitization:** OH radicals **Atmospheric half-life:** 2.1 Hour

Method: Estimated.

### Propylene glycol

**Biodegradability:** Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Biodegradation may occur under anaerobic conditions (in the absence of

oxygen).

10-day Window: Pass **Biodegradation:** 81 % **Exposure time:** 28 d

Method: OECD Test Guideline 301F or Equivalent

10-day Window: Not applicable **Biodegradation:** 96 % **Exposure time:** 64 d

Method: OECD Test Guideline 306 or Equivalent

Theoretical Oxygen Demand: 1.68 mg/mg

Chemical Oxygen Demand: 1.53 mg/mg

**Biological oxygen demand (BOD)** 

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Incubation Time	BOD
5 d	69.000 %
10 d	70.000 %
20 d	86.000 %

**Photodegradation** 

Atmospheric half-life: 10 Hour

Method: Estimated.

# **Refined Linseed Oil**

Biodegradability: Material is expected to be readily biodegradable.

# **Balance**

Biodegradability: No relevant data found.

#### **Bioaccumulative Potential**

### 2-chloro-N-(n-butoxymethyl)-N-(2,6-diethylphenyl)acetamide (butachlor)

Bioaccumulation: No relevant data found.

#### **Penoxsulam**

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

Partition coefficient: n-octanol/water(log Pow): -0.602 Measured

### Propylene glycol

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

Partition coefficient: n-octanol/water(log Pow): -1.07 Measured

Bioconcentration factor (BCF): 0.09 Estimated.

# **Refined Linseed Oil**

Bioaccumulation: No relevant data found.

# **Balance**

Bioaccumulation: No relevant data found.

# **Mobility in Soil**

# 2-chloro-N-(n-butoxymethyl)-N-(2,6-diethylphenyl)acetamide (butachlor)

No relevant data found.

# **Penoxsul**am

Potential for mobility in soil is high (Koc between 50 and 150).

Partition coefficient (Koc): 73 Measured

# Propylene glycol

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.

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

Partition coefficient (Koc): < 1 Estimated.

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#### **Refined Linseed Oil**

No relevant data found.

#### **Balance**

No relevant data found.

#### Results of PBT and vPvB assessment

### 2-chloro-N-(n-butoxymethyl)-N-(2,6-diethylphenyl)acetamide (butachlor)

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

# **Penoxsulam**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

#### Propylene glycol

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

### **Refined Linseed Oil**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

#### **Balance**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

#### Other adverse effects

### 2-chloro-N-(n-butoxymethyl)-N-(2,6-diethylphenyl)acetamide (butachlor)

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

### Penoxsulam

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

# Propylene glycol

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

# **Refined Linseed Oil**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

#### **Balance**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

# 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

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methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

This product when disposed of in its unused and uncontaminated state should be treated as a hazardous waste.

### 14. TRANSPORT INFORMATION

Classification for ROAD and Rail transport:

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.(2-chloro-N-(n-butoxymethyl)-N-(2,6-

diethylphenyl)acetamide (butachlor))

UN number UN 3082

Class 9
Packing group III

Environmental hazards 2-chloro-N-(n-butoxymethyl)-N-(2,6-diethylphenyl)acetamide

(butachlor)

**Classification for SEA transport (IMO-IMDG):** 

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.(2-chloro-N-(n-butoxymethyl)-N-(2,6-

diethylphenyl)acetamide (butachlor))

UN number UN 3082

Class 9
Packing group III
Marine pollutant Yes

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.(2-chloro-

N-(n-butoxymethyl)-N-(2,6-diethylphenyl)acetamide

(butachlor))

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.

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# 15. REGULATORY INFORMATION

The following statutes, regulations and standards have the related prescribes on chemicals in terms of safe use, storage, transportation, loading and unloading, classification and symbol etc.

Provisions on the Environmental Administration of New Chemical Substances.

The Regulation on Chemicals Safe Use at Working Site

Law on Prevention and Control of Environmental Pollution Caused by Solid Waste.

Regulation on the Safety Management of Hazardous Chemicals

General rule of classification and hazard communication of chemicals (GB 13690)

Occupational Exposure Limits for Hazardous Agent in The workshop Chemical Hazardous Agents(GBZ 2.1).

Classification and Code of Dangerous Goods (GB 6944)

List of Dangerous Goods (GB 12268)

# China. Inventory of Existing Chemical Substances in China (IECSC) (IECSC)

The product is used in a biocide/pesticide application and is subject to the applicable regulation. It contains a component exempt from inventory listing requirements. Because an intentional component of the product is not on the inventory, the product may only be used in the exempt application.

# 16. OTHER INFORMATION

# **Hazard Rating System**

### **NFPA**

Health	Flammability	Instability
1	1	0

# Revision

Identification Number: 97055109 / A407 / Issue Date: 2018.06.27 / Version: 1.0

DAS Code: GF-2913

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

Legend

TWA	8-hr TWA	
US WEEL	/EEL USA. Workplace Environmental Exposure Levels (WEEL)	

#### Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL -

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Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI -Korea Existing Chemicals Inventory: LC50 - Lethal Concentration to 50 % of a test population: LD50 -Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified: Nch - Chilean Norm: NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program: NZIoC - New Zealand Inventory of Chemicals: OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature: SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

### **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.

DOW AGROSCIENCES (JIANGSU) CO., 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.