

# SAFETY DATA SHEET

Date: September 1, 2015  
Serial No.: AGG10001Ef\_01

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME **LX434 DINOTEFURAN 20SG**

SYNONYM Tenchu 20SG

USE OF PRODUCT Insecticide

### COMPANY IDENTIFICATION

Mitsui Chemicals Agro, Inc.

Nihonbashi Dia Building, 1-19-1, Nihonbashi, Chuo-ku, Tokyo

103-0027, JAPAN

Telephone: +81-3-5290-2810

Telefax: +81-3-3231-1183

### EMERGENCY TELEPHONE NUMBER

Transportation (24 hr);

CHEMTREC +1-800-424-9300 (USA)

+1-703-527-3887

(International)

Health emergency;

6:30 AM to 4:30 PM Pacific time (PT)

National Pesticides Information Center +1-800-858-7378

During other times

Poison Control Center +1-800-222-1222

## 2. HAZARDS IDENTIFICATION

### GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

#### Physical hazards

Explosives	Not applicable
Flammable gases	Not applicable
Flammable aerosols	Not applicable
Oxidizing gases	Not applicable
Gases under pressure	Not applicable
Flammable liquids	Not applicable
Flammable solids	Not classified
Self-reactive chemicals	Not classified
Pyrophoric liquids	Not applicable
Pyrophoric solids	Not classified
Self-heating chemicals	Not classified
Chemicals which, in contact with water, emit flammable gases	Not classified
Oxidizing liquids	Not applicable
Oxidizing solids	Not classified
Organic peroxides	Not applicable
Corrosive to metals	Classification not possible

#### Health hazards

##### Acute toxicity

Oral	Not classified.
Dermal	Not classified
Inhalation	Classification not possible
Skin corrosion/irritation	Not classified
Serious eye damage/eye irritation	Not classified

Respiratory Sensitization	Classification not possible
Skin sensitization	Not classified
Germ cell mutagenicity	Classification not possible
Carcinogenicity	Classification not possible
Reproductive Toxicity	Classification not possible
Specific Target Organ Toxicity	
Single exposure	Classification not possible
Repeated exposure	Category 1 (lung)
Aspiration Hazard	Classification not possible

Aquatic hazard	
Acute	Not classified
Chronic	Category 1

#### GHS LABEL ELEMENTS

##### Hazard Pictograms



##### Signal Word

Danger

##### Hazard Statements

- H372: Causes damage to lung through prolonged or repeated exposure.
- H410: Very toxic to aquatic life with long lasting effects.

##### Precautionary Statements

###### Prevention

- P260: Do not breathe dust.
- P264: Wash hands and face thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P273: Avoid release to the environment.

###### Response

- P314: Get medical advice/attention if you feel unwell.
- P391: Collect spillage.

###### Disposal

- P501: Dispose of contents or container in accordance with local, regional, national and international regulations.

#### OTHER HAZARDS

Toxic to bees and silk worms.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	%	CAS No.
Dinotefuran (*)	20	165252-70-0
Amorphous silica	<10	112926-00-8
Sodium dodecylbenzene sulfonate	<10	25155-30-0
Inert ingredients	>60	-

\* *N*-methyl-*N'*-nitro-*N'*-((tetrahydro-3-furyl)methyl)guanidine  
 (*RS*)-1-methyl-2-nitro-3-(tetrahydro-3-furylmethyl)guanidine

Occupational exposure limits are, if available, listed in Section 8.

### 4. FIRST AID MEASURES

#### INGESTION

Call poison control center or doctor for treatments 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. Do not give anything by mouth to an unconscious person.

#### INHALATION

Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

#### SKIN CONTACT

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

#### EYE CONTACT

Hold eye 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. Call a poison control center or doctor for treatment advice.

### 5. FIREFIGHTING MEASURES

#### SUITABLE EXTINGUISHING MEDIA

Foam, dry chemical, CO<sub>2</sub>, water, sand.

#### GENERAL HAZARD

Emits toxic fumes in fire condition. This product is not expected to burn or explode in normal conditions, but may burn violently if involved in fire. Dinotefuran is self-reactive under high temperature. Exposure to heat may promote violent decomposition.

#### HAZARDOUS COMBUSTION PRODUCTS

Nitrogen oxides.

#### FIREFIGHTING INSTRUCTIONS

Keep unnecessary and unprotected personnel away. Shut off supply if possible. Remove containers to safe place if possible. Keep containers and surroundings cool by spraying with water. Fight fire from an upwind position.

#### FIREFIGHTING EQUIPMENT

Respiratory and eye protection is required for firefighting personnel.

Full protective equipment and self-contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires.

### 6. ACCIDENTAL RELEASE MEASURES

#### PERSONAL PRECAUTIONS AND EMERGENCY PROCEDURES

Warn and evacuate in the neighborhood as necessary. Keep unnecessary and unprotected personnel away. Wear appropriate personal protective equipment as specified in Section 8. Remove all sources of ignition. Stop leak if possible without personal risk.

#### ENVIRONMENTAL PRECAUTIONS

Do not let this product enter the environment.

#### METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Scoop or sweep up the spilled product and place it in a disposal container. Use appropriate tools. Avoid dispersal of dust in the air.

### 7. HANDLING AND STORAGE

#### HANDLING

##### Technical Measures

Use only with adequate ventilation.

Where there may be potential of fire or explosion hazard, use explosion-proof electrical equipment and take precautions against build-up of electrostatic charges.

Wear appropriate personal protective equipment. Keep away from heat, sparks, open flames and hot surfaces.

#### Precautions

Handle with care. Do not breathe dust. Avoid contact with eyes, skin and clothing. Take precautionary measures against static discharge.

#### Advice on general occupational hygiene

Provide hand and eye wash station near work area. Wash hands thoroughly after use. Take off contaminated protective equipment before entering rest areas. Do not eat, drink or smoke when using this product.

#### STORAGE

##### Storage Conditions

Keep away from heat, flame and all sources of ignition. Store in a cool, dark and well-ventilated area. Keep container tightly closed and sealed until ready for use.

Do not contaminate other pesticides, fertilizers, water, foodstuffs or feed by storage and disposal.

##### Packaging Materials

Fiber drums.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### OCCUPATIONAL EXPOSURE LIMIT VALUES

[Amorphous silica]

OSHA-PEL: 80/(%SiO<sub>2</sub>) mg/m<sup>3</sup>

ACGIH-TLV: 10 mg/m<sup>3</sup> (as dust)

#### ENGINEERING CONTROLS

Provide general ventilation. Using of closed system or local exhaust ventilation is recommended. Provide safety shower and eye wash station near work area.

#### PERSONAL PROTECTION

Eye/face protection:	Safety glasses, goggles, face shield.
Skin Protection:	
Hand protection:	Chemical resistant gloves.
Body Protection:	Safety helmet, protective clothing, safety boots.
Respiratory protection:	Chemical cartridge respirator.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White granule.
Odor:	Faint characteristic odor.
Odor threshold:	Not available
pH (24 °C):	6.2
Melting point:	Not available
Initial boiling point and boiling range:	Not applicable
Flash point:	Not available
Flammability:	Not flammable
Vapor pressure:	Not available
Vapor density:	Not available
Evaporation rate:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Explosibility (22°C):	Not explosive
Minimum explosive concentration;	130 mg/L (humidity 58%)
Bulk density:	0.62
Solubilities:	Not available

Partition coefficient n-octanol/water:	Not available
Viscosity:	Not available

## 10. STABILITY AND REACTIVITY

### CHEMICAL STABILITY

Stable under normal conditions.

### HAZARDOUS REACTIONS

No hazardous reaction when handled and stored according to provisions.

### CONDITIONS TO AVOID

Heat, sources of ignition.

### INCOMPATIBLE MATERIALS

Not available.

### HAZARDOUS DECOMPOSITION PRODUCTS

Nitrogen oxides.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

Oral:	Rat	LD <sub>50</sub> >2000 mg/kg	[Not classified]
Dermal:	Rat	LD <sub>50</sub> >2000 mg/kg	[Not classified]
Inhalation:	Rat	LC <sub>50</sub> >2.943 mg/L/4hr	[Classification not possible]

### Skin Corrosion/Irritation

Rabbit	Slight Irritant	[Not classified]
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### Serious Eye Damage/Irritation

Rabbit	Mild irritant	[Not classified]
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Respiratory Sensitization	Not available	[Classification not possible]
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### Skin Sensitization

Guinea pig	Not a skin sensitizer.	[Not classified]
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Germ Cell Mutagenicity	Not available	[Classification not possible]
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Carcinogenicity	Not available	[Classification not possible]
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None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP or OSHA as a carcinogen.

Reproductive Toxicity	Not available	[Classification not possible]
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### Specific Target Organ Toxicity

Single Exposure:	Not available	[Classification not possible]
Repeated Exposure:	Contains amorphous silica (category 1, lung)	[Category 1 (lung)]

Aspiration Hazard	Not available	[Classification not possible]
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## 12. ECOLOGICAL INFORMATION

### HAZARDOUS TO THE AQUATIC ENVIRONMENT

Acute: The ecotoxicological data does not meet the criteria.

[Not classified]

Chronic: Contains Dinotefuran. (category 1, M=10)

[Category 1]

### ECOTOXICITY:

Carp	LC <sub>50</sub> (96hr)	>100 mg/L
Rainbow trout	LC <sub>50</sub> (96hr)	>108 mg/L
<i>Daphnia magna</i>	EC <sub>50</sub> (48hr)	199 mg/L
Algae ( <i>Pseudokirchneriella subcapitata</i> )	EC <sub>50</sub> (72hr)	>100 mg/L
[Dinotefuran]		
Chironomid ( <i>Chironomus riparius</i> , water spiked study)	NOEC (27d)	0.00288 mg/L

## 13. DISPOSAL CONSIDERATIONS

### WASTE FROM RESIDUES

Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

### CONTAMINATED PACKAGING

Do not reuse or refill this container. Completely empty drum by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment.

Then offer for recycling if available or dispose of liner in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## 14. TRANSPORT INFORMATION

### UN

Hazard Class:	9
UN Number:	UN3077
Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S. (Dinotefuran mixture)
Packing Group:	III
Marine Pollutant:	Yes

### SPECIAL PRECAUTIONS FOR TRANSPORT

Make sure that the containers have no puncture or leakage. Avoid rough handling and dropping. Prevent the collapse of cargo piles.

## 15. REGULATORY INFORMATION

### UNITED STATES

TARIFF CODE: 3808.91.50.00

### FEDERAL REGULATIONS:

#### EPA

This product is a pesticide (EPA Registration No. 86203-25) exempt from TSCA inventory.

#### Regulation under FIFRA

All pesticides are governed under FIFRA (Federal Insecticide, Fungicide and Rodenticide Act). Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulating facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

Hazard information as required on the pesticide label

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Causes moderate eye irritation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash before reuse.

#### ENVIRONMENTAL HAZARDS

This pesticide is toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in water adjacent to treated areas. Do not dispose equipment washwaters or rinsate into a natural drain or water body.

This compound is toxic to honey bees. The persistence of residues and potential residual toxicity of Dinotefuran in nectar and pollen suggests the possibility of chronic toxic risk to honey bee larvae and the eventual instability of the hive.

#### CERCLA Reportable Quantity

DODECYLBENZENE SULFONATE RQ: 1000lbs

#### SARA Title III

##### SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES

None.

##### SECTION 311/312 HAZARD CATEGORIES

Delayed health hazard

##### SECTION 313 TOXIC CHEMICALS

None.

#### STATE REGULATIONS

Each state may promulgate standards more stringent than the federal government. The user should consult state or local authorities.

#### CALIFORNIA PROPOSITION 65

This product contains no chemicals known to the state of California to cause cancer and reproductive toxicity.

Responsibility for compliance with applicable laws and regulations is with the user.

## 16. OTHER INFORMATION

References: In-house data

This SDS was prepared in compliance with USA OSHA Hazard Communication Standard (29 CFR 1910.1200)

To the best of our knowledge, the information contained herein is accurate.

However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.