



SHANGHAI MINGDOU AGROCHEMICAL CO., LTD

Add: Rm 1210, Zhenyuan Building, No. 2052 North Zhongshan Rd, Shanghai, China

Tel: 0086 21 52912919, 52045380 Fax: 0086 21 52912097 Web: [www.agromdc.com](http://www.agromdc.com)

## MATERIAL SAFETY DATA SHEET OF NICOSULFURON 75% WDG

### 1. IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

**Supplier:** SHANGHAI MINGDOU AGROCHEMICAL CO., LTD

**Address:** Rm. 1210, Zhenyuan Building, No. 2052 North Zhongshan Rd, Shanghai, China

**FAX:** +86 21 52912097, 61638378

**TEL:** +86 21 52912919, 52045380, 52045370

**Product name:** Nicosulfuron 75% WDG

**Product use:** Herbicide

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

**Formulation Type:** water soluble granule(WDG)

**Active Ingredients:** Nicosulfuron

**Chemical Abstracts name:**

2-[[[(4,6-dimethoxy-2-pyrimidinyl)amino]carbonyl]amino]sulfonyl]-N,N-dimethyl-3-pyridinecarboxamide

**IUPAC name:**

2-(4,6-dimethoxypyrimidin-2-yl)carbonylsulfamoyl)-N,N-dimethylnicotinamide;  
1-(4,6-dimethoxypyrimidin-2-yl)-3-(3-dimethylcarbonyl-2-pyridylsulfonyl)urea

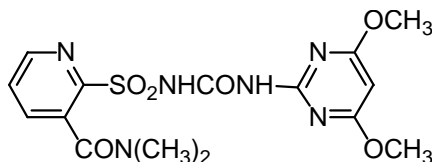
**Chemical Family:** sulfonylurea

**CAS NO.** 111991-09-4

**Molecular Formula:** C<sub>15</sub>H<sub>18</sub>N<sub>6</sub>O<sub>6</sub>S

**Molecular Weight:** 410.4

**Structural Formula:**



**Composition:**

| INGREDIENT        | CAS NO        | PROPORTION |
|-------------------|---------------|------------|
| Nicosulfuron      | 111991-09-4   | 75% Min    |
| Inert ingredients | Not available | 25% Max    |

Other ingredients determined not to be hazardous



### 3. HAZARDS IDENTIFICATION

**Caution:** Causes moderate eye irritation.

Harmful if absorbed through skin.

Avoid contact with skin, eyes or clothing.

### 4. FIRST AID MEASURES

**General:** Have the product container, label or Material Safety Data Sheet with you when going for treatment. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given.

**Skin contact:** Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

**Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

**Ingestion:** If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting.

**Inhalation:** Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poison Control Centre immediately.

**Note to physician:** No specific antidote. Treat symptomatically.

### 5. FIRE FIGHTING MEASURES

**Fire and Explosion Hazard:** Negligible fire and explosion hazard.

**Hazardous combustion products:** As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion. Exposure to decomposition products may be a hazard to health.

**Extinguishing media:** Small fires: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Large fires: Use alcohol-resistant foam or water spray.

**Media to be avoided:** Do not use a solid water stream as it may scatter and spread fire.

**Fire-fighting instructions:** Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

**Protective equipment for firefighters:** In the event of fire, wear self-contained breathing apparatus.

### 6. ACCIDENT RELEASE MEASURES

**Personal precautions:** Refer to protective measures listed in sections 7 and 8.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.



**Method for cleaning up:** Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

## 7. HANDLING AND STORAGE

**Handling:** Read the label before use. No special protective measures against fire required. Avoid contact with skin and eyes. When using, do not eat, drink or smoke. For personal protection see section 8.

**Storage:** Requirements for storage areas and containers: No special storage conditions required. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feed.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure limits:** nicosulfuron 5 mg/m<sup>3</sup> Respirable dust 8 h TWA

**Engineering controls:** Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. If airborne mists or vapours are generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Where necessary, seek additional occupational hygiene advice.

### Personal protective equipment (PPE):

**Respiratory protection:** No personal respiratory protective equipment normally required. A particulate filter respirator may be necessary until effective technical measures are installed.

**Hand protection:** Chemical resistant gloves should be used. Gloves should be certified to an appropriate standard. Gloves should have a minimum breakthrough time that is appropriate to the duration of exposure. The breakthrough time of gloves varies according to the thickness, material and manufacturer. Gloves should be changed when breakthrough is suspected. Suitable material: nitrile rubber.

**Eye protection:** Eye protection is not usually required. Follow any site specific eye protection policies.

**Skin and body protection:** Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation / penetration characteristics of the clothing material. Wash with soap and water after removing protective clothing. Decontaminate clothing before re-use, or use disposable equipment (suits, aprons, sleeves, boots, etc.). Wear as appropriate: impervious protective suit.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Flowable white granule.

**pH:** 4.0-9.0

**Solubility in water:** dispersible



**Flash point:** not flammable

**Density:** Approx. 0.67 g/cm<sup>3</sup> at 20°C

## 10. STABILITY AND REACTIVITY

**Chemical stability:** Stable under normal conditions.

**Conditions to avoid:** Keep this product away from heat, sparks, flame, and other sources of ignition (e.g. pilot lights, electric motors, static electricity).

**Hazardous decomposition:** Combustion or thermal decomposition will evolve toxic and irritant vapours.

**Incompatible materials:** No data available.

**Hazardous reactions:** Hazardous polymerization will not occur.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity:

Oral: LD<sub>50</sub> (rat): >2000 mg/kg

Dermal: LD<sub>50</sub> (rat): >4000 mg/kg

Inhalation: LC<sub>50</sub> (rat): >4.12 mg/l

### Irritant properties:

Skin: Irritant

Eye: Slightly Irritant

**Allergenic and sensitizing effects:** May cause sensitisation by skin contact.

**Carcinogenic:** No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

**Reproductive effects:** Not expected to have other reproductive effects.

**Teratogenicity:** Not expected to be a teratogen.

**Mutagenicity:** Not expected to be mutagenic in humans.

## 12. ECOLOGICAL INFORMATION

**The following information is for the active ingredient, Nicosulfuron.**

### Ecotoxicity:

Birds Acute oral LD<sub>50</sub>: for bobwhite quail >2250 mg/kg.

———— Dietary LC<sub>50</sub> (5 days): for mallard ducks and bobwhite quail >5620 ppm.

Fish LC<sub>50</sub> (96 h): for bluegill sunfish and rainbow trout >1000 mg/l.

Daphnia EC<sub>50</sub> (48 h): >1000 mg/l.

Algae NOEC (96h): for green algae 100 mg/l.

Bees LD<sub>50</sub> (contact): >20 µg/bee

Earthworm: LC<sub>50</sub> (14 days): for earthworms >1000 mg/kg.



**Persistence and degradability:** Aerobic, Result: Not readily biodegradable. Nicosulfuron is not persistent in soil.

**Bioaccumulative potential:** Nicosulfuron has low bioaccumulation potential.

### 13. DISPOSAL CONSIDERATION

**Product:** Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

**Contaminated packaging:** Empty remaining contents. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

### 14. TRANSPORT INFORMATION

**UN Number:** 3077

**UN Proper shipping name:** Environmentally hazardous substance, solid, n.o.s. (Nicosulfuron)

**Transport hazard class:** 9

**Packing group:** III

**Marine pollutant:** Yes

### 15. REGULATORY INFORMATION

**Hazard symbols:**

Xn Harmful

N Dangerous for the environment

**Risk phrases:**

R20 Harmful by inhalation.

R38 Irritating to skin.

R43 May cause sensitisation by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases:**

S2 Keep out of the reach of children.

S13 Keep away from food, drink and animal feeding stuffs.

S20/21 When using, do not eat, drink or smoke.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S35 This material and its container must be disposed of in a safe way.

S36/37 Wear suitable protective clothing and gloves.



SHANGHAI MINGDOU AGROCHEMICAL CO., LTD

Add: Rm 1210, Zhenyuan Building, No. 2052 North Zhongshan Rd, Shanghai, China

Tel: 0086 21 52912919, 52045380 Fax: 0086 21 52912097 Web: [www.agromdc.com](http://www.agromdc.com)

---

S46 If swallowed, seek medical advice immediately and show this container or label.

S57 Use appropriate containment to avoid environmental contamination.

## 16. OTHER INFORMATION

This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of the how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact the company.

END OF MSDS