SECTION 1 Chemical product and Company identification

Product Name: Arrow 400 OD™ (Nicosulfuron)
Chemical name: 2-(4,6-dimethoxypyrimidin-2-ylcarbamoylsulfamoyl)-N,N-dimethylnicotinamide
Formula: C_{15}H_{18}N_{6}O_{6}S
Product Use: Commercial Herbicide
Supplier: SINERIA HOLLAND BV
Randwycksingel 20-A015
6229 EE Maastricht The Netherlands
www.sineria.com

SECTION 2 Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Content (%)</th>
<th>CAS RN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicosulfuron</td>
<td>4%</td>
<td>111991-09-4</td>
</tr>
</tbody>
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SECTION 3 Hazards Identification

Emergency overview: Warning!
Causes eye irritation. Harmful if absorbed through the skin.

SECTION 4 First Aid Measures

Inhalation: No specific intervention is indicated as the compound is not likely to be hazardous by inhalation. Consult a physician if necessary.

Skin contact: In case of contact, immediately wash skin with soap and water. Wash contaminated clothing before reuse.

Eye contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Ingestion: If swallowed, immediately give 2 glasses of water and induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.
SECTION 5 Fire Fighting Measures

Not a fire and explosion hazard.

Suitable extinguish media: Dry chemical, carbon dioxide, foam and water.

Fire fighting instructions: As in any fire, wear self-contained breathing apparatus pressure-demand and full protection gear. Keep upwind. Isolate hazard area. Avoid inhalation of smoke and fumes. Use water or foam to reduce fumes. Do not touch spilled material. If possible, move containers from area. Evacuate personnel to a safe area.

SECTION 6 Accidental release measures

General and disposal: Use proper protective equipment to minimize personal exposure (See Section 8). Take all necessary action to prevent and to remedy the effects of the spill. Ensure that the disposal is in compliance with regulations.

Land spill or leaks:

Small spill: Absorb with an inert absorbent material such as granular clay, saw dust or pet litter. Sweep up carefully while avoiding the formulation of a dust cloud. Place in an approved chemical waste container for disposal. Rinse spill area with small amount of soapy water. Contain and absorb the rinsate with inert absorbents and place into the same disposal container. Area can be washed with water to remove the last trace residue. Do not allow water to contaminate water supplies or sewers.

Large spill: Eliminate all ignition sources. Stop leak if you can do so without coming into contact with spilled material. All equipment used to clean up spill should be grounded. Prevent entry into waterways, sewers, basements or confined areas. Inform appropriate authorities immediately if contamination occurs.

SECTION 7 Handling and storage

Handling: Avoid contact with eyes, skin or clothing.

Users Should: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Storage: Store in a cool, well ventilated and dry place, out of reach of children. Keep product in the original container tightly closed. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

SECTION 8 Exposure controls/Personal protection

Engineering Controls: Use only with adequate ventilation.

Eye and face protections: Safety glasses, splash goggles or face-shield.
Skin protections: Long-sleeved shirt and long pants, waterproof gloves and chemical-resistant footwear. Wash contaminated skin promptly. Launder contaminated clothing and clean protective equipment before reuse. Wash hand thoroughly after handling.

Respiratory protection: Ensure adequate ventilation. If this material is not used in a chemical fume hood, wear a appropriated air purifying respirator or positive pressure air-supplied respirator where there is a potential for inhalation exposure.

SECTION 9 Physical & Chemical properties

Appearance: Off-white liquid
Vapour pressure: Negligible
pH: 7-9
Explosivity: Not explosive

SECTION 10 Stability & Reactivity

Stability: Stable under normal condition
Hazardous Polymerization: Will not occur
Incompatibilities: Incompatible or can react with strong oxidizers

SECTION 11 Toxicological Information

Acute Toxicity /Irritation Studies
Ingestion: Acute oral LD<sub>50</sub> (Rats) >5000 mg/kg
Dermal: Acute dermal LD<sub>50</sub> (Rabbit) >2000 mg/kg
Inhalation: Acute inhalation (Rats – 4hr) LC<sub>50</sub> = 5,47 mg/lt
Eye Contact: Moderately Irritating (Rabbit)
Skin Contact: Slightly irritating (Rabbit)
Skin Sensitization: Not a sensitizer (Guinea Pig)

Chronic Toxicity Studies
- Mutagenicity: Not found (Ames Test)
- NOEL: In 28 d feeding trials on rats and mice, no adverse effect up to 30g/kg diet
- Toxicity Class: WHO (a.i.) III; EPA (formulation) IV.

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SECTION 12 Ecological Information

Toxicity to Birds: Dietary oral LD_{50} for Mallard Ducks >5620 ppm
Toxicity to Fish: LC_{50} (96 h) for Carp >1000mg/l
Toxicity to bees: LD_{50} (contact) >20μg/bee; dietary LC_{50} (48 h) >1000ppm

SECTION 13 Disposal Considerations

- Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations.
- Do not flush to surface water or sanitary sewer system.

Waste Disposal: Waste resulting from the use of this product may be disposed of on site or at an approved waste facility.

Container Disposal: Triple rinse (or equivalent) the container. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or by incineration. If allowed by state and local authorities, by burning. If burned, stay away from smoke.

SECTION 14 Transport Information

DOT/IMO Proper Shipping Name: Not regulated

SECTION 15 Regulatory Information

Symbols: N (Dangerous for the environment) & Xi (Irritant)

SECTION 16 Other Information

The information contained in the Material Safety Data Sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for with other materials or in processes other than those specifically described herein.

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