

**MAXIMUS 537.5 SE**  
**MATERIAL SAFETY DATA SHEET**

**SECTION-1**

**PRODUCT /COMPANY IDENTIFICATION**

|                          |   |  |
|--------------------------|---|--|
| Product Name             | : | <b>MAXIMUS 537.5 SE</b>  |
| Active Ingredient        | : | Metalachlor 375g/L + Terbutylazine 125 g/L + Mesotrione 37.5 g/L SE  |
| Chemical Name            | : | <b>Metolachlor:</b> 2-chloro-6'-ethyl-N-[(1RS)-2-methoxy-1-methylethyl]acet-o-toluidide<br><b>Terbutylazine:</b> N <sup>2</sup> -tert-butyl-6-chloro-N <sup>4</sup> -ethyl-1,3,5-triazine-2,4-diamine<br><b>Mesotrione:</b> 2-(4-mesyl-2-nitrobenzoyl)cyclohexane-1,3-dione. |
| CAS No                   | : | <b>Metolachlor:</b> 51218-45-2<br><b>Terbutylazine:</b> 5915-41-3<br><b>Mesotrione:</b> 104206-82-8  |
| Chemical Family          | : | <b>Metolachlor:</b> Chloroacetamide<br><b>Terbutylazine:</b> Triazine<br><b>Mesotrione:</b> Triketone  |
| Type of Formulation      | : | Suspo-Emulsion (SE)  |
| Indented Use             | : | Agricultural herbicide   |
| Company/Supplier details | : | <b>SINERIA HOLLAND BV.</b><br>Randwycksingel 20-A015 6229 EE, Maastricht.<br>The Netherlands<br><a href="http://www.sineria.com">www.sineria.com</a>   |

**SECTION-2**

**COMPOSITION/ INFORMATION ON INGREDIENTS**

| Active Ingredient | CAS No      | QTY (g/L) |
|-------------------|-------------|-----------|
| Metolachlor       | 51218-45-2  | 375.0 g/L |
| Terbutylazine     | 5915-41-3   | 125.0 g/L |
| Mesotrione        | 104206-82-8 | 37.5 g/L  |

## SECTION-3

## HAZARD IDENTIFICATION

### Pictograms

:



### H-Statements

- H315 : Causes skin irritation  
H317 : May cause an allergic skin reaction  
H320 : Causes eye irritation  
H402 : Harmful to aquatic life  
H410 : Very toxic to aquatic life with long-lasting effects

### Precautionary Statements

- P101 : If medical advice is needed, have product container or label at Hand.  
P102 : Keep out of reach of children.  
P280 : Wear protective gloves, protective clothing and eye and/or face protection.  
P273 : Avoid release to the environment.
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## SECTION-4

## FIRST AID MEASURES

### Health hazards

- If ingestion : If product swallowed in any form, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.
- If inhaled : If product is inhaled, remove person to fresh air. If not breathing, give artificial respiration. Seek medical attention if breathing problems develop.
- If on skin : Remove contaminated clothing. Wash skin and hair thoroughly; do two soap and water washings.
- If in eyes : Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
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## SECTION-5

### FIRE FIGHTENING MEASURES

- Suitable extinguishing media : In event of fire, use fire extinguishing methods are carbon dioxide, dry chemical, foam, water fog.
- Specific hazards arising from the chemical : If involved in a fire, the dehydrated components may emit toxic fumes.
- Firefighting Instructions : Fire fighters should wear full protective gear, including self-contained breathing apparatus. Keep unnecessary people away. If it can be done safely, remove intact containers from the fire. Otherwise, use water spray to cool them. Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of fire control water or another extinguishing agent and spillage safely later.
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## SECTION-6

### ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : In case of spillage it is important to take all steps necessary to: Avoid contact with the spilled material or contaminated surfaces. Extinguish or remove any sources of ignition. When dealing with spills do not eat, drink or smoke and wear protective clothing and equipment. Keep people and animals away. Prevent spilled material from entering drains or watercourses.
- Environmental precautions : Do not allow to get into surface water, drains and ground water. If the product contaminates rivers and lakes or drains inform respective authorities. Reposition any leaking containers so as to minimize leakage. Dam and absorb spill with an absorbent material (eg sand or soil). Shovel the absorbed spill into drums
- Methods and materials for containment and cleaning up : Contain spill and absorb with earth, sand, clay, or other absorbent material. Collect and store in properly labelled, sealed drums for safe disposal. Deal with all spillages immediately). Clean contaminated floors and objects thoroughly, observing environmental regulations If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.
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## SECTION-7

## HANDLING AND STORAGE

- Precautions for safe handling : Safe work practices are recommended. Avoid contact with eyes and skin.  
When opening the container and preparing spray wear appropriate PPE (refer Section 8).  
Do not spray under high wind conditions.
- Conditions for safe storage : Keep out of reach of children, unauthorized persons and animals.  
Store in tightly sealed original containers in a dry secure place away from fertilizers, feed and food.
- Incompatibilities : Store out of direct sunlight and extreme temperature.
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## SECTION-8

## EXPOSURE CONTROLS AND PERSONAL PROTECTION

- Engineering controls : Use only with adequate ventilation. Keep container tightly closed. Do not generate dust.

### Personal protective equipment (PPE)

- Respiratory protection : Use NIOSH/MSHA approved respirator appropriate for exposure of concern.
- Hand protection : Protective gloves
- Eye protection : Wear safety glasses with side shields. Additionally, wear a face shield where the possibility exists for face contact due to splashing, spraying or airborne contact with this material.
- Skin and body protection : Where there is potential for skin contact have available and wear as appropriate impervious gloves, apron, pants, and jacket.
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## SECTION-9

## PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Light grey to green liquid
- Odor : Aromatic
- pH : 5-9
- Flash Point : Not Applicable
- Solubility (water) : Emulsion
- Stability : Stable under normal temperature and pressure
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## SECTION-10

## STABILITY & REACTIVITY

- Possibility of Hazardous Reactions : No dangerous reaction known under conditions of normal use and storage conditions.
- Chemical Stability : This product is chemically stable under recommended conditions of storage, use and temperature.
- Conditions to Avoid : Protect this product from light. Store in the closed original container in a dry, cool, well ventilated area out of direct sunlight.
- Incompatible materials : Strong acids, strong bases, strong oxidizing agents.
- Polymerization : This product will not undergo polymerization reactions.
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## SECTION-11

## TOXICOLOGICAL INFORMATION

### Based on A.I. information

#### Metolachlor

- Acute oral LD<sub>50</sub>, mg/kg rats : >1940
- Acute dermal LD<sub>50</sub>, mg/kg rabbits : >5050
- Acute Inhalation LD<sub>50</sub>, mg/kg rat : >2.02 (4h)
- Skin Irritation (rabbits) : Mild irritant
- Eye Irritation (rabbits) : Mild irritant
- Skin Sensitization (guinea pigs) : Possibly a sensitizer

#### Terbuthylazine

- Acute oral LD<sub>50</sub>, mg/kg rats : >1000-1590
- Acute dermal LD<sub>50</sub>, mg/kg rabbits : >2000
- Acute Inhalation LD<sub>50</sub>, mg/kg rat : >5.3 (4h)
- Skin Irritation (rabbits) : Mild irritant
- Eye Irritation (rabbits) : Slight irritant
- Skin Sensitization (guinea pigs) : Mild sensitizer

#### Mesotrione

- Acute oral LD<sub>50</sub>, mg/kg rats : >5000
- Acute dermal LD<sub>50</sub>, mg/kg rabbits : >2000
- Acute Inhalation LD<sub>50</sub>, mg/kg rat : >4.75 (4h)
- Skin Irritation (rabbits) : Not an irritant
- Eye Irritation (rabbits) : Not an irritant
- Skin Sensitization (guinea pigs) : Not a Sensitizer
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## SECTION-12

## ECO-TOXICOLOGICAL INFORMATION

### Based on A.I. Information

#### Metolachlor

|   |   |                            |
|---|---|----------------------------|
| Dietary LC <sub>50</sub> (8d) for Bobwhite quail          | : | >5000 mg/kg diet           |
| Dietary LC <sub>50</sub> (8d) for mallard ducks           | : | >4640 mg/kg diet           |
| Rainbow trout LC <sub>50</sub> , (96h) mg/L               | : | 5.5                        |
| Bluegill sunfish, (96h) mg/L                              | : | 6.3                        |
| Daphnia LC <sub>50</sub> (48h)                            | : | 12.66 mg/l                 |
| Algae EC <sub>50</sub> (120h) for <i>S. Capricornutum</i> | : | 0.035 mg/L                 |
| Bees (LD <sub>50</sub> , µg/bee)                          | : | >99 (oral); >130 (Contact) |
| Worms LC <sub>50</sub> , (14 d) for earthworm             | : | 153 mg/kg soil             |

#### Terbuthylazine

|  |   |                            |
|--|---|----------------------------|
| Acute oral LD <sub>50</sub> for Mallard ducks          | : | >2000 mg/kg                |
| Acute oral LD <sub>50</sub> for Japanese quail         | : | >2000 mg/kg                |
| Rainbow trout LC <sub>50</sub> , (96h)                 | : | >2.2mg/L                   |
| Mirror carp LC <sub>50</sub> ,                         | : | >5.7 mg/L                  |
| Daphnia EC <sub>50</sub> (48h)                         | : | >69.3mg/L                  |
| Algae EC <sub>50</sub> (72h) for <i>S. subspicatus</i> | : | 0.016mg/L                  |
| Bees (LD <sub>50</sub> , µg/bee)                       | : | >32 (contact); 22.6 (oral) |
| Worms (LC <sub>50</sub> , for earthworms)              | : | >1000mg/kg Soil            |

#### Mesotrione

|  |   |                            |
|--|---|----------------------------|
| Acute oral LD <sub>50</sub> for Bobwhite quail         | : | >2150 mg/kg                |
| Acute oral LD <sub>50</sub> for mallard ducks          | : | 2974 mg/kg                 |
| Rainbow trout LC <sub>50</sub> , (96h) mg/kg           | : | 30                         |
| Bluegill sunfish LC <sub>50</sub> , (96h) mg/kg        | : | 48                         |
| Daphnia LC <sub>50</sub> (48h)                         | : | 54 mg/L                    |
| Algae EC <sub>50</sub> (72h) for <i>P. subcapitata</i> | : | 0.32mg/L                   |
| Bees (LD <sub>50</sub> , µg/bee)                       | : | >34 (oral); >100 (contact) |
| Worms (LC <sub>50</sub> , (14d) for earthworm          | : | >1000 mg /Kg soil          |

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## SECTION-13

## DISPOSAL CONSIDERATIONS

|                           |   |   |
|---------------------------|---|---|
| Disposal of the products  | : | All herbicide waste are considered acutely toxic. On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals. |
| Disposal of the container | : | Do not re-use empty containers. (Consult local authority).  |

## SECTION-14

## TRANSPORT INFORMATION

|  |   |  |
|--|---|--|
| General Transport Information          | : | It is considered good practice not to transport agricultural chemical products with food, food related materials and animal feed products. |
| Proper shipping Name<br>[Land/Air/Sea] | : | Environmentally hazardous substance, liquid, n.o.s.<br>(Contains Metolachlor, terbuthylazine & Mesotrione,)                                |
| UN Number                              | : | 3082   |
| Class                                  | : | 9  |

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## SECTION-15

## REGULATORY INFORMATION

GHS07: Harmful  
GHS09: Environmental hazard

### H-Statements

|      |   |  |
|------|---|--|
| H315 | : | Causes skin irritation                               |
| H317 | : | May cause an allergic skin reaction                  |
| H320 | : | Causes eye irritation                                |
| H402 | : | Harmful to aquatic life                              |
| H410 | : | Very toxic to aquatic life with long-lasting effects |

### Precautionary Statements

|      |   |   |
|------|---|---|
| P101 | : | If medical advice is needed, have product container or label at Hand.       |
| P102 | : | Keep out of reach of children.  |
| P280 | : | Wear protective gloves, protective clothing and eye and/or face protection. |
| P273 | : | Avoid release to the environment.   |

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## 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 use with other materials or in processes other than those specifically described herein.

Supplier make no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. We disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.

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