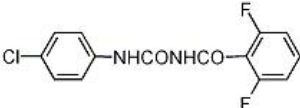


## TECHNICAL DATA SHEET OF

### Diflubenzuron 15% SC

|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Chemistry identity</b>               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Common name                             | Diflubenzuron 15% SC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| IUPAC name                              | 1-(4-chlorophenyl)-3-(2,6-difluorobenzoyl)urea                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| CAS No                                  | 35367-38-5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Formula structure                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Physical and chemical properties</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Appearance                              | Off-white liquid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Content                                 | 15%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| pH                                      | 5.0-8.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Density                                 | NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Solubility in water                     | Disperse in water                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Mammalian toxicity</b>               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Acute oral                              | LD <sub>50</sub> > 5000 mg/kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Acute dermal                            | LD <sub>50</sub> for rats > 5000 mg/kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Acute inhalation                        | LC <sub>50</sub> (4 h) for rats 5.0 mg/L                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Environment fate</b>                 | <p><b>Animals</b> In rats, diflubenzuron is extensively metabolised by dechlorination, glucuronidation, sulphation and hydrolysis. Diflubenzuron is poorly absorbed from the gastro-intestinal tract and is found in the faeces. Absorbed radioactivity is removed almost completely in 24-48 hours. Diflubenzuron and/or its metabolites do not accumulate in any other parts of the rat body. <b>Plants</b> Non-systemic. Not metabolised on plants. <b>Soil/Environment</b> Diflubenzuron is strongly absorbed by the soil/humic acid complex and is immobile to slightly mobile in soil. (K<sub>oc</sub> 1983-6918 ml/g). Rapidly degraded in soil under aerobic conditions, DT<sub>50</sub> (20 °C, pH 2) 2-6.7 days. The principal degradation products are 4-chlorophenylurea (CPU) and 2,6-difluorobenzoic acid (DFBA). Diflubenzuron hydrolyses to CPU and DFBA (pH 9, 25 °C) DT<sub>50</sub> 32.5 d. Diflubenzuron is fairly persistent in the water/sediment system under aerobic conditions, DT<sub>50</sub> (whole system) 3.7-5.4 d (20 °C) with the formation of two major metabolites, CPU and DFBA. Diflubenzuron is classified as not readily biodegradable.</p> |
| <b>Handling and storage</b>             | <p><b>Handling:</b> Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.</p> <p><b>Storage:</b> Store in cool place. Keep container tightly closed in a dry and well-ventilated place.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Package</b>                          | 20 liters drum or customized package                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |