



# **Draft Assessment Report**

## **Evaluation of Active Substances**

Plant Protection Products

Prepared according to **assimilated Regulation No 1107/2009**  
as it applies in Great Britain

### **Inpyrfluxam**

### **Volume 3 – B.3 (AS)**

### **Data on Application**

Great Britain

March 2026

**Version History**

<b>When</b>	<b>What</b>
November 2025	Initial DAR
March 2026	Updates made after ECP

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## B.3. Data on Application

### B.3.1. Function and envisaged use of the Active Substance

Inpyrfluxam is intended to be used as an agricultural fungicide for the control of foliar diseases in winter and spring wheat, winter and spring barley, and durum wheat.

### B.3.2. Mode of action and effects on harmful organisms

Inpyrfluxam is a carboxamide fungicide belonging to the chemical group of pyrazole-4-carboxamides. It is a succinate dehydrogenase inhibitor (SDHI) acting at the respiration complex II target site and will therefore belong to FRAC (Fungicide Resistance Action Committee) Code 7.

Succinate dehydrogenase activity is a mandatory step of the mitochondrial TCA cycle which is the main route for energy production in the cells. Normally, the TCA cycle continuously feeds the respiratory chain with reducing equivalents. The binding of Inpyrfluxam blocks this cycle which leads to a major cellular energy breakdown. This specifically disrupts the Krebs cycle, preventing the oxidation of succinate into fumarate.

### B.3.3. Harmful organisms controlled and crops or products protected or treated

Inpyrfluxam is intended to be used for the control of fungal pathogens, specifically *Puccinia recondita* (PUCCRE) and *Puccinia striiformis* (PUCCSI) in winter wheat, spring wheat, and durum wheat, and *Puccinia hordei* (PUCCHD) in winter and spring barley.

### B.3.4. Information on the occurrence or possible of the development of resistance and appropriate management strategies

Inpyrfluxam is a new active substance belonging to the chemical group of pyrazole-4-carboxamides, which is within the SDHI fungicide group (FRAC Code 7 – target site C2). It has a broad-spectrum foliar fungicide action interrupting the normal action of the enzyme complex succinate dehydrogenase, disrupting the Krebs cycle and preventing the oxidation of succinate into fumarate.

There are existing target site mutations conferring reduced resistance to SDHIs; however, different target site mutations confer varying levels of reduced sensitivity to SDHIs. Various

mutations are present in field populations and as a result SDHI fungicides provide variable levels of efficacy depending on the type of strains present and the frequency of these strains in the field. Resistance is known in several fungal pathogens in field populations; within cereal pathogens, some frequently occurring mutations are C-T79N and C-N86S in *Septoria tritici* and C-G79R, C-H134R, and C-S135R in *Pyrenophora teres*. Resistance has also been reported in *Ramularia collo-cygni* in barley.

SDHI fungicides are currently classified as having a medium to high resistance risk by FRAC and inpyrfluxam is expected to have the same risk. SDHIs do not show cross resistance with other chemical classes such as strobilurins, benzimidazoles, anilinopyrimidines or demethylation inhibitors. Therefore, no cross resistance to fungicides from different mode of action groups is expected. However, within the SDHI group, cross-resistance is expected and has been shown for multiple strains, including between inpyrfluxam and other SDHIs, such as fluxapyroxad and benzovindiflupyr.

In cereals in GB, it is common for up to 4 foliar fungicides to be applied per cereal crop. However, there is a FRAG-UK (Fungicide Resistance Action Committee) restriction in GB that prevents more than 2 foliar applications of any SDHI fungicide to the same cereal crop. Additionally, a solo SDHI product, such as 'S-2399 60 g/L EC', must always be used in mixture with another product, recommended for control of the same target disease that contains a fungicide from a different cross resistance group and is applied at a dose that will give robust control. Where powdery mildew is present, an eradicant partner is required.

The target pathogens of inpyrfluxam in the GAP, *Puccinia* spp., are classified as having a low resistance risk according to FRAC. However, it must be noted that the proposed label for the representative product of inpyrfluxam includes additional pathogens, some of which are classified as medium risk (e.g. *Septoria tritici*, *Pyrenophora* spp.) or high risk (e.g. *Blumeria graminis*, *Ramularia collo-cygni*) according to FRAC.

To manage the resistance risk, a resistance management strategy has been proposed for the representative product of inpyrfluxam, as follows:

- Apply SDHI fungicides always in mixtures.
- The mixture partner should provide satisfactory disease control when used alone on the target disease and must have a different mode of action.
- Apply a maximum of 2 SDHI fungicide containing sprays per cereal crop.
- Apply the SDHI fungicide preventatively or as early as possible in the disease cycle. Do not rely only on the curative potential of SDHI fungicides.
- Strongly reduced rate programs including multiple applications must not be used. Refer to manufacturers' recommendations for rates.

The exact management strategy for 'S-2399 60 g/L EC' and other products containing inpyrfluxam will be considered in full at the product authorisation stage.

Baseline sensitivity data for a range of pathogens have been produced and will be examined at the product authorisation stage.

### **B.3.5. Isomers**

Not applicable.

**B.3.6. References Relied on**

<b>Data Point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Company Report No. Source (where different from company) GLP or GEP status Published or not</b>	<b>Vertebrate Study Y/N</b>	<b>Data Protection Claimed Y/N</b>	<b>Justification if Data Protection is claimed</b>	<b>Owner</b>	<b>Previous evaluation</b>
Volume 3CA point B.3	Unknown	2023	Inpyrfluxam (S-2399)  DOCUMENT M-CA, Section 3  FURTHER INFORMATION ON THE ACTIVE SUBSTANCE	N	N	N.A.	Sumitomo Chemical	N.A.
Volume 3CA point B.3	Unknown	2021	REPORT TO SUPPORT THE ACTIVE SUBSTANCE APPROVAL  Part B Section 3  Efficacy Data and Information	N	N	N.A.	Sumitomo Chemical	N.A.

			Product code: S-2399 6EC					
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