

## TECHNICAL DATA BULLETIN

### PRODUCT TECHNICAL INFORMATION AND APPLICATIONS

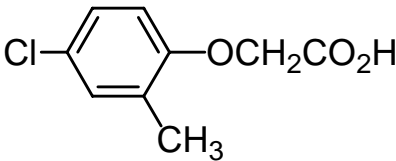
## **MALKIN<sup>®</sup> 400SL**

(MCPA 40%)

### 1. INTRODUCTION:

**Malkin 400SL** is a soluble concentrate herbicide formulation 400 g/L of the active ingredient MCPA. It is used for post-emergence control of annual and perennial broad-leaved weeds.

### 2. ACTIVE INGREDIENT:

<b>Common name</b>	<b>MCPA</b>
Chemical Group	Aryloxyalkanoic acid
CAS Registry No.	94-74-6
Molecular Formula	C <sub>9</sub> H <sub>9</sub> ClO <sub>3</sub>
Structural Formula	
Molecular weight	200.6
Vapour Pressure	2.3 10 <sup>-2</sup> mPa (20 °C); 4 10 <sup>-1</sup> mPa (32°C)
K <sub>ow</sub> log P	2.75 (pH 1), 0.59 (pH 5), -0.71 (pH 7) (25 °C)
Acute oral LD <sub>50</sub> , Male rat	>4000 mg/kg



### 3. PHYSIOCHEMICAL PROPERTIES OF THE PRODUCT:

Assay:	"MCPA" 400 ± 18 g/L
Appearance:	Clear brown liquid free of visible impurities
Density:	1.1191 kg/L
pH	9.224
Flash Point:	°C
Water insoluble:	None
Stability on dilution:	5% (solution in standard hard water 342 ppm hardness)

### 4. MODE OF ACTION:

**Malkin 400SL** is Selective, systemic, hormone-type herbicide, absorbed by the leaves and roots, with translocation. Concentrates in the meristematic regions, where it inhibits growth.

### 5. PHYTOTOXICITY:

**Malkin 400SL** is phytotoxic to nes, vegetables, cotton, and ornamentals

### 6. COMPATIBILITY:

**Malkin 400SL** is compatible with many other herbicides including 2, 4-D and Bromoxynil..

### 7. USES:

**Malkin 400SL** is used for the Post-emergence control of annual and perennial broad-leaved weeds (including thistles and docks) in cereals (alone or undersown), herbage seed crops, flax, rice, vines, peas, potatoes, asparagus, grassland, turf, under fruit trees, and on roadside verges and embankments, etc., at 0.28-2.25 kg/ha. Control of broad-leaved and woody weeds in forestry. Control of aquatic broad-leaved weeds. Often used in combination with other herbicides.



## 8. APPLICATION:

The following table can be used as a guide for the application of **Malkin 400SL**:

CROP	Application Rate		Withholding Period
	Dipping	Spray	
Wheat and Barely	At the beginning of tellering stage	1-1.5L / ha in 400-1000 L of water.	
Turf and fallow areas	When weeds are 3-4 leaves.	0.5-2 L/ha	35 days
Corn and sorgum	After weeds germination, around 10 cm length.	1-2 L/ha	

## 9. HANDLING, STORAGE AND TRANSPORTATION:

**Malkin 400SL** should be transported its original labeled, tightly closed container and stored in a dry well ventilated store at room temperature and away from direct sunlight. It should also be kept away from children, animals, food, feed and drinks and unauthorized personnel. Personnel involved in handling this material should wear protective gloves, clean protective clothing and a facemask.