

## Evaluation Report for Category B, Subcategory 2.3, 2.4 Application

**Application Number:** 2016-2210  
**Application:** New End-Use Product Chemistry – Identity and Proportion of Formulants  
**Product:** UPI S-MET Herbicide  
**Registration Number:** #####  
**Active ingredient (a.i.):** S- Metolachlor and R-enantiomer  
**PMRA Document Number:** 2759060

### Purpose of Application

The purpose of this application was to register the end-use product (EP), UPI S-MET Herbicide, containing the active ingredient, S-Metolachlor and R-enantiomer, to be used on various crops for selective weed control.

### Chemistry Assessment

UPI S-MET Herbicide is formulated as an emulsifiable concentrate containing S-metolachlor and R-enantiomer at a nominal concentration of 960 g/L. This EP has a density of 1.1056 – 1.1065 g/mL and pH of 5.82. The required chemistry data for UPI S-Met Herbicide have been provided, reviewed and found to be acceptable.

### Health Assessments

UPI S-MET herbicide was of low acute toxicity in rats via the oral, dermal and inhalation routes of exposure. It was minimally irritating to the eyes and non-irritating to the skin of rabbits. It was not a skin sensitizer in guinea pigs.

The use of UPI S-MET Herbicide, for application to forests and woodlots, terrestrial food and feed crops, as well as outdoor ornamentals, is not expected to result in potential occupational or bystander exposure over the registered uses of S-metolachlor and R-enantiomer. No health risks of concern are expected when workers follow label directions and wear personal protective equipment as stated on the label.

No residue data for S-metolachlor and R-enantiomer were submitted to support the registration of UPI S-MET Herbicide. The use pattern on the UPI S-MET Herbicide label, including the target crops, application rates, timing and number of applications, spray volumes, preharvest intervals, tank-mix partners or additives, and rotational intervals, is identical to or more restrictive than the registered use pattern on the label of the precedent product. The slight changes in the formulation ingredients of UPI S-MET Herbicide are not expected to significantly impact the residues in/on treated commodities. Therefore, residues of S-metolachlor and R-enantiomer in/on treated commodities are not expected to increase and will be covered under the maximum residue limits (MRLs) established for S-metolachlor and R-enantiomer. Consequently, the dietary exposure to residues of S-metolachlor and R-enantiomer is not expected to increase with the registration of the EP and will not pose health risks of concern to any segment of the population, including infants, children, adults and seniors.

### **Environmental Assessment**

No environmental data were submitted to support the registration of UPI S-MET Herbicide. The uses on the EP are the same as several precedent products and are not expected to increase environmental exposure or risk. Existing environmental label statements are expected to mitigate known risks.

### **Value Assessment**

Registration of a generic product may increase product competition in the marketplace, which may in turn reduce purchasing costs of similar products.

The formulation of UPI S-MET was compared to the formulation of the precedent product. It was concluded that differences in the formulations would be unlikely to result in any significant impact on product performance, in the terms of both efficacy and crop tolerance.

### **Conclusion**

The Pest Management Regulatory Agency has completed an assessment of the information provided and has found the information sufficient to support the registration of UPI S-MET Herbicide.

## References

<b>PMRA Document Number</b>	<b>References</b>
2635745	2016, Additional Product Chemistry for UPI S-Met Herbicide, DACO: 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.5.15, 3.5.4, 3.5.5
2635746	2016, Additional Product Chemistry for UPI S-Met Herbicide, DACO: 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.5.15, 3.5.4, 3.5.5 CBI
2635747	2015, Moccasin Herbicide - Product Identity and Composition, Description of the Materials Used, Description of the Formulation Process, Discussion of the Formation of Impurities, and Certified Limits, DACO: 3.2.1, 3.2.2, 3.2.3, 3.3.1 CBI
2635748	2011, Development And Validation of Analytical Method For Active Ingredient Analysis Of S-Metolachlor 960 g/L EC by HPLC, DACO: 3.4.1, 3.4.2
2635749	2011, Accelerated Storage Stability of S-Metolachlor 960 g/L EC, DACO: 3.5.10, 3.5.14 CBI
2635750	2011, Flash Point of S-Metolachlor 960 g/L EC, DACO: 3.5.11
2635751	2014, Explodability of S-Metolachlor 960 g/L EC, DACO: 3.5.12
2635752	2013, Miscibility of S-Metolachlor 960 g/L EC, DACO: 3.5.13
2635753	2011, Appearance (Colour, Physical State And Odour) of S-Metolachlor 960 g/L EC, DACO: 3.5.1, 3.5.2, 3.5.3
2635754	2011, Specific Gravity of S-Metolachlor 960 g/L EC, DACO: 3.5.6
2635755	2011, pH of S-Metolachlor 960 g/L EC, DACO: 3.5.7
2635756	2011, Oxidation/Reduction Properties of S-Metolachlor 960 g/L EC, DACO: 3.5.8
2635757	2011, Viscosity of S-Metolachlor 960 g/L EC, DACO: 3.5.9
2635758	2011, Acute Oral Toxicity Study of S-Metolachlor 960 g/L EC in Rats, DACO: 4.2.1
2635759	2011, Acute Dermal Toxicity Study of S-Metolachlor 960 g/L EC in Rats, DACO: 4.2.2
2635760	2011, Acute Inhalation Toxicity Study of S-Metolachlor 960 g/L EC, DACO: 4.2.3
2635761	2011, Acute Eye Irritation Study of S-Metolachlor 960 g/L EC, DACO: 4.2.4
2635762	2011, Acute Eye Irritation Study of S-Metolachlor 960 g/L EC, DACO: 4.2.5
2635763	2011, Skin Sensitization Study of S-Metolachlor 960 g/L EC in Guinea Pigs [Guinea Pig Maximization Test], DACO: 4.2.6

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