

## Evaluation Report for Category B Subcategory 5.0 Application

**Application Number:** 2009-1302  
**Application:** New MRL for previously assessed TGAI  
**Product:** Phenmedipham Technical Herbicide  
**Registration Number:** 19204  
**Active ingredient (a.i.):** Phenmedipham  
**PMRA Document Number :** 1931060

### Purpose of Application

The purpose of this application was to establish maximum residue limits (MRLs) to cover residues of the active ingredient, phenmedipham, in/on imported spinach, beets and beet commodities.

### Chemistry Assessment

A chemistry assessment was not required for this application.

### Health Assessment

Residue data for phenmedipham in sugar beets, table (red) beets and spinach from trials conducted in NAFTA representative regions were submitted to support the establishment of MRLs on imported sugar beets, garden beets and spinach. In addition, a processing study in treated sugar beets was assessed to determine the potential for concentration of residues of phenmedipham into processed commodities. Residues of phenmedipham at the recommended MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

**Table 1 Summary of field trial and processing data used to establish maximum residue limits (MRLs)**

Commodity	Application method/ Total application rate (g a.e./ha)	PHI (days)	Residues (ppm)		Mean experimental processing factor	Currently established MRL (ppm)	Recommended MRL(ppm)
			Min	Max			
Sugar Beets	Post-emergent/ 1.12	60-90	<0.0 2	<0.1	1.3x (molasses) Residues of phenmedipham were non-quantifiable in refined sugar.	0.05	0.1 (sugar beet roots); 0.2 (molasses)
Table (Red) Beet Tops	Post-emergent/ 1.12	44-50	<0.0 2	0.0 3	Not required	None	0.2 (garden beet tops)
Table (Red) Beet Roots	Post-emergent/ 1.12	44-50	<0.0 2	0.0 6	Not required	None	0.2 (garden beet roots)
Spinach	Post-emergent/ 1.1-1.2	20-24	<0.0 5	3.6	Not required	None	4 (spinach)

### Environmental Assessment

An environmental assessment was not required for this application.

### Value Assessment

A value assessment was not required for this application.

### Conclusions

Following the review of all available data, MRLs of 0.1 ppm for sugar beet roots, 0.2 ppm for molasses, 0.2 ppm for garden beet tops, 0.2 ppm for garden beet roots and 4 ppm for spinach are recommended to cover residues of phenmedipham in/on imported commodities.

## References

PMRA Document Number: 1128122

Reference: 1983, Metabolism of phenmedipham in the sugar beet (*Beta vulgaris* L.), Data Numbering Code: 6.3

PMRA Document Number: 1128150

Reference: 1993, Stability of phenmedipham residues in or on sugar beets stored at 4°C for 5 months and processed commodities stored at -10°C for 5 months USA 1992, Data Numbering Code: 7.3

PMRA Document Number: 1128151

Reference: 1988, Stability of total residues of phenmedipham in beet roots and leaves during deep freeze storage, Data Numbering Code: 7.3

PMRA Document Number: 1128154

Reference: 1976, Residues of EP-452 (phenmedipham) and EP-475 (desmedipham) in sugar beet roots and tops following the application of Betenal/ Betanex tank-mix I the USA 1976, Data Numbering Code: 7.4.1

PMRA Document Number: 1128155

Reference: 1976, Residues of phenmedipham in sugar beet roots and tops following the application of Betenal in the USA 1976, Data Numbering Code: 7.4.1

PMRA Document Number: 1128163

Reference: 1989, Total residues of phenmedipham in sugar beets and processed commodities following treatment with SPIN-AID USA 1988, Data Numbering Code: 7.2.1, 7.4.5

PMRA Document Number: 1228767

Reference: 1971, Phenmedipham residues in red beet roots, Data Numbering Code: 7.2.1, 7.4.5

PMRA Document Number: 1742994

Reference: 2004, Phenmedipham: Magnitude of the residue on fresh spinach, Data Numbering Code: 7.2.1, 7.3, 7.4.1

PMRA Document Number: 1743000

Reference: 1968, Residues of phenmedipham in sugar beet roots and tops following the application of Betenal in the USA 1968, Data Numbering Code: 7.4.1

PMRA Document Number: 1743002

Reference: 1972, Residues of phenmedipham in sugar beet roots and tops following the application of Betenal in the USA 1971, Data Numbering Code: 7.4.1

PMRA Document Number: 1743004

Reference: 1973, Residues of phenmedipham in sugar beet roots and tops following the application of Betenal in the USA 1973, Data Numbering Code: 7.4.1

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