

## Evaluation Report for Category B, Subcategory 1.2 Application

**Application Number:** 2007-2315  
**Application:** Category B, Subcategory 1.2 (New/Changes TGAI or ISP Product Chemistry – New Source, New registrant)  
**Product:** Microthiol Technical  
**Registration Number:** TBD  
**Active ingredients (a.i.):** Sulfur (SUL) fungicide  
**PMRA Document Number:** 1812680

### Background

Sulphur is a group M fungicide and acaricide that is currently registered for uses on pome fruits, stone fruits, grapes, Saskatoonberries and greenhouse cucumbers.

### Purpose of Application

The registrant has proposed registration of a new source of sulphur under the PSR II process.

### Chemistry Assessment

Based on the three criteria for chemical equivalence, the proposed source of sulphur was found to be equivalent to the registered source.

Common Name: Sulfur  
Chemical Name: Sulfur

Microthiol® Technical has the following properties:

Property	Result
Colour and physical state	Yellow powder
Nominal concentration	99.7%
Odour	Odourless
Specific gravity	2.07
Vapour pressure	0.527 mPa at 30.4°C

Property	Result
pH	N/A
Solubility in water	$6.3 \times 10^{-2}$ mg/L (pH 7) at 20°C
n-Octanol/water partition coefficient ( $K_{ow}$ )	log Kow = 5.68 (pH 7) at 20°C

The chemistry requirements for Microthiol® Technical have been completed.

### **Health Assessments**

A toxicological assessment was not required for Microthiol Technical. Occupational exposure and food residue assessments were not required since the product is chemically equivalent to the registered source, which has already been assessed.

### **Environmental Assessment**

An environmental assessment was not required since the product is chemically equivalent to the registered source, which has already been assessed.

### **Value Assessment**

Sulphur falls under the generic category, so no further data is required from the registrant.

### **Conclusion**

The PMRA has completed an evaluation of the subject application and has found the information sufficient to register Microthiol Technical.

## References

1395991	Applicants Name and Office Address, DACO: 2.1
1395992	Manufacturers Name and Office Address and Plant Address, DACO: 2.2
1395993	Product Trade Name, DACO: 2.3
1395994	Other Names, DACO: 2.3.1
1395995	Common Name, DACO: 2.4
1395996	Chemical Name, DACO: 2.5
1395997	Chemical Abstracts Registry Number, DACO: 2.6
1395998	Structural Formula, DACO: 2.7
1395999	Molecular Formula, DACO: 2.8
1396000	Molecular Weight, DACO: 2.9
1396001	Manufacturing Summary, DACO: 2.11.1
1396002	Manufacturing Summary CBI, DACO: 2.11.1 CBI
1396003	Description of Starting Materials, DACO: 2.11.2
1396004	Description of Starting Materials CBI, DACO: 2.11.2 CBI
1396005	Detailed Production Process Description, DACO: 2.11.3
1396006	Detailed Product Process Description CBI, DACO: 2.11.3 CBI
1396007	Discussion of Formation of Impurities, DACO: 2.11.4
1396008	Discussion of Formation of Impurities CBI, DACO: 2.11.4 CBI
1396009	Specifications: Establishing Certified Limits, DACO: 2.12.1
1396010	Specifications: Establishing Certified Limits CBI, DACO: 2.12.1 CBI
1396013	Methodology/Validation, DACO: 2.13.1
1396014	2005, Methodology/Validation CBI, DACO: 2.13.1 CBI
1396015	Confirmation of Identity, DACO: 2.13.2
1396016	Batch Data, DACO: 2.13.3
1396017	2005, Analytical profile of five batches. Batch Data CBI, DACO: 2.13.3 CBI
1396018	Impurities of Toxicological Concern, DACO: 2.13.4
1396019	Impurities of Toxicological Concern, DACO: 2.13.4 CBI
1396020	Chemical and Physical Properties: Colour, DACO: 2.14.1
1396021	Physical State, DACO: 2.14.2
1396022	Odour, DACO: 2.14.3
1396023	Melting Point/Melting Range, DACO: 2.14.4
1396024	Boiling Point/Boiling Range, DACO: 2.14.5
1396025	Density or Specific Gravity, DACO: 2.14.6
1396026	Density or Specific Gravity CBI, DACO: 2.14.6 CBI
1396027	Water Solubility, DACO: 2.14.7
1396028	Solvent Solubility, DACO: 2.14.8
1396029	Vapour Pressure, DACO: 2.14.9
1396030	Dissociation Constant, DACO: 2.14.10
1396031	Octanol/Water Partition Coefficient, DACO: 2.14.11
1396032	UV/Visible Absorption Spectra, DACO: 2.14.12
1396033	Stability (Temperature, Metals), DACO: 2.14.13
1396034	Storage Stability Data - Waiver request, DACO: 2.14.14
1396035	Sample of Analytical Stnds and Res of Conc, DACO: 2.15

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