

## Evaluation Report for Category L, Subcategory 1.1 Application

**Application Number:** 2022-5165  
**Application:** Application Subject to Protection of Proprietary Interests in Pesticide (PIIP) Data Policy – Equivalency/Data Compensation  
**Product:** Shanli Mesotrione Technical  
**Registration Number:** 35333  
**Active ingredient (a.i.):** Mesotrione  
**PMRA Document Number:** 3512041

### Purpose of Application

The purpose of this application was to register Shanli Mesotrione Technical, a new source of the active ingredient mesotrione, based on a registered precedent product.

### Chemistry Assessment

Common Name: Mesotrione  
 IUPAC\* Chemical Name: 2-[4-(methylsulfonyl)-2-nitrobenzoyl]cyclohexane-1,3-dione  
 CAS† Chemical Name: 2-[4-(methylsulfonyl)-2-nitrobenzoyl]-1,3-cyclohexanedione

\* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Shanli Mesotrione Technical has the following properties:

Property	Result
Colour and physical state	Pale yellow solid
Nominal concentration	98.2%
Odour	Characteristic odour
Specific Gravity	1.5033
Vapour pressure	$1.81 \times 10^{-10}$ mPa at 25°C
pH	3.41 at 20°C
Solubility in water	0.23 g/L at pH of 3.43
n-Octanol/water partition coefficient	$\log K_{ow} = 0.867$ at pH 1.43

The required chemistry data for Shanli Mesotrione Technical have been provided, reviewed, and found to be acceptable.

### **Health, Environmental and Value Assessments**

Health, environmental and value assessments were not required for this application.

### **Conclusion**

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information acceptable to support the registration of Shanli Mesotrione Technical.

## References

<b>PMRA Document Number</b>	<b>Reference</b>
3393852	2021, Color, Physical State and Odour of Shanli Mesotrione Technical, DACO: 2.14.1,2.14.2,2.14.3
3393853	2020, Melting Point, DACO: 2.14.4
3393854	2021, Density, DACO: 2.14.6
3393855	2020, Solubility in Water and Solvents, DACO: 2.14.7,2.14.8
3393856	2020, Vapour Pressure, DACO: 2.14.9
3393857	2021, Dissociation Constant, DACO: 2.14.10
3393858	2020, Partition Coefficient, DACO: 2.14.11
3393859	2021, UV-VIS Absorption Spectra, DACO: 2.14.12
3393860	2021, Stability, DACO: 2.14.13
3393861	2021, Storage Stability, DACO: 2.14.14
3393862	2021, pH, DACO: 2.14.15,830.7000

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