

## Evaluation Report for Category B, Subcategory 1.3 Application

**Application Number:** 2021-0669  
**Application:** Changes to TGAI Product Chemistry-Specifications  
**Product:** AC 92,553 TECHNICAL HERBICIDE  
**Registration Number:** 21995  
**Active ingredient (a.i.):** Pendimethalin  
**PMRA Document Number:** 3453022

### Purpose of Application

The purpose of this application was to amend the manufacturing process of the registered product AC 92,553 TECHNICAL HERBICIDE.

### Chemistry Assessment

Common Name: Pendimethalin  
 IUPAC\* Chemical Name: *N*-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitroaniline  
 1979 Rules: *N*-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine  
 CAS† Chemical Name: *N*-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzenamine

\* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

AC 92,553 TECHNICAL HERBICIDE has the following properties:

Property	Result	
Colour and physical state	Orange-yellow solid	
Nominal concentration	95%	
Odour	Faint nutty odour	
Density	1.17 g/mL at 25°C	
Vapour pressure	3.34 mPa at 25°C	
pH	4.7	
Solubility in water	<u>pH</u>	<u>Solubility (mg/L)</u>
	4	0.26
	6	0.309
	9	0.265
n-Octanol/water partition coefficient	log K <sub>ow</sub> = 5.4	

The required chemistry data for AC 92,553 TECHNICAL HERBICIDE have been provided, reviewed, and found to be acceptable.

### **Health Assessments**

The minor amendments to the manufacturing process do not change the toxicological profile of the product; therefore, no toxicology data were required.

Dietary and occupational exposure assessments were not required for this application.

### **Environmental and Value Assessments**

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 amended manufacturing process of AC 92,553 TECHNICAL HERBICIDE.

## References

### PMRA

#### Document

Number	Reference
1135107	2003, BAS 455 H: Validation of BASF Method F-117 for the Determination of [CBI REMOVED] in Pendimethalin by [CBI REMOVED], DACO: 2.13.1 CBI
3200885	2021, DACO 2.11.3 - Detailed Production Process Description, DACO: 2.11.3 CBI
3228580	2021, Amended Product Identity and Composition of Pendimethalin Technical (TGAI), DACO: 2.11.1,2.11.2,2.11.3,2.11.4,2.13.4 CBI
3262478	2020, Compositional Analysis for Pendimethalin Technical HAN Report No. 1, DACO: 2.13.1,2.13.3,2.13.4 CBI
3267428	2021, DACO 2- Response to PMRA Deficiency Letter, DACO: 2.13.1 CBI
3267429	2013, Validation of SOP-PA.2073 - Determination of Minor Components in Technical Grade Active Ingredient (TGAI) Pendimethalin (BAS 455 H) by [CBI REMOVED], DACO: 2.13.1 CBI
3267430	2000, Validation of HRGC Method M-3287 for the Analysis of [CBI REMOVED] in PROWL based Formulations, DACO: 2.13.1 CBI
3267431	2018, Validation of the Analytical Method M-1578 [CBI REMOVED] in TGAI and Formulations Containing Pendimethalin, DACO: 2.13.1 CBI
3267432	2000, Methods of Analysis and Supporting Validation Documentation To Support the Reregistration of Pendimethalin Technical in the EU (REPORT AMENDMENT 2), DACO: 2.13.1 CBI
3267433	2013, Complete validation of the analytical method CIPAC 357 for the determination of the purity of technical Pendimethalin, DACO: 2.13.1 CBI
3267434	2021, BAS 455 H Analytical Methods Results Equivalency Report, DACO: 2.13.1 CBI
3406315	2022, Support of Expanded Upper Concentration Limit for [CBI REMOVED] in Technical Grade Pendimethalin (AC 92,553) PCP#, DACO: 2.12 CBI
3406316	2022, Clarification Regarding the Minor Components of AC 92,553 TECHNICAL HERBICIDE, Registration No. 21995, DACO: 2.13.3 CBI
3406317	2022, Minors 2, DACO: 2.13.3 CBI

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