

## Evaluation Report for Category B, Subcategory 1.1 Application

**Application Number:** 2019-6778  
**Application:** New TGAI Product Chemistry - New source (site), same registrant  
**Product:** Gibberellins A4 + A7 Technical Powder 2  
**Registration Number:** 33934  
**Active ingredients (a.i.):** Gibberellins A4 and A7  
**PMRA Document Number (English PDF):** 3159335

### Purpose of Application

The purpose of this application was to register Gibberellins A4 + A7 Technical Powder 2, a new source of technical gibberellins A4 and A7.

### Chemistry Assessment

Common Name: Gibberellins A4A7

IUPAC\* Chemical Name: A<sub>4</sub>: (3*S*,3*aR*,4*S*,4*aR*,7*R*,9*aR*,9*bR*,12*S*)-12-hydroxy-3-methyl-6-methylene-2-oxoperhydro-4*a*,7-methano-3,9*b*-propanoazuleno[1,2-*b*]furan-4-carboxylic acid

A<sub>7</sub>: (3*S*,3*aR*,4*S*,4*aR*,7*R*,9*aR*,9*bR*,12*S*)-12-hydroxy-3-methyl-6-methylene-2-oxoperhydro-4*a*,7-methano-9*b*,3-propenoazuleno[1,2-*b*]furan-4-carboxylic acid

CAS† Chemical Name: A<sub>4</sub>: (1*α*,2*β*,4*αα*,4*bb*,10*β*)-2,4*a*-dihydroxy-1-methyl-8-methylenegibbane-1,10-dicarboxylic acid 1,4*a*-lactone

A<sub>7</sub>: (1*α*,2*β*,4*αα*,4*bb*,10*β*)-2,4*a*-dihydroxy-1-methyl-8-methylenegibb-3-ene-1,10-dicarboxylic acid 1,4*a*-lactone

\* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Gibberellins A4 + A7 Technical Powder 2 has the following properties:

Property	Result
Colour and physical state	White solid
Nominal concentration	95.15%
Odour	Odourless
Density	0.5 g/mL
Vapour pressure	0.160 Pa for GA4; 0.067 Pa for GA7
pH	3.4 (1% slurry)

Property	Result
Solubility in water	334.2 mg/L
n-Octanol/water partition coefficient	log K <sub>ow</sub> = 2.47 at pH 4 log K <sub>ow</sub> = 0.146 at pH 7 log K <sub>ow</sub> = -1.23 at pH 10

The required chemistry data for Gibberellins A4 + A7 Technical Powder 2 have been provided, reviewed, and found to be acceptable.

### Value, Health and Environmental Assessments

Value, health and environmental 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 sufficient to register Gibberellins A4 + A7 Technical Powder 2, a new source of technical gibberellins A4 and A7.

### References

PMRA Document Number	Reference
3063235	2018, Product Identity Manufacturing Process Formation of Unintentional Ingredients Gibberellines A4 and A7 (GA4 and GA7), DACO: 2.11.1, 2.11.2, 2.11.3, 2.11.4, 2.12.1
3063237	2018, GA4/7: Batch Analysis, DACO: 2.13.1, 2.13.2, 2.13.3, 2.13.4
3156355	2018, GA4/7: Method Validation, DACO: 2.13.1

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