

Evaluation Report for Category B, Subcategory 2.1, 3.1 Application

Application Number: 2020-3383
Application: New EP Product Chemistry – Guarantee
New Product Labels – Application Rate Increase or Decrease
Product: Blush 2X Plant Growth Regulator Solution
Registration Number: 34224
Active ingredient (a.i.): Prohydrojasmon
PMRA Document Number : 3259802

Purpose of Application

The purpose of this application was to register Blush 2X Plant Growth Regulator Solution, a new end-use product plant growth regulator, intended for use on red apples after fruit have entered the maturation stage to promote colour development.

Chemistry Assessment

Blush 2X Plant Growth Regulator Solution is formulated as an emulsifiable concentrate containing prohydrojasmon at a concentration of 10.00 %. This end-use product has a density of 1.17 g/mL and pH of 6.1 (1% solution). The required chemistry data for Blush 2X Plant Growth Regulator Solution have been provided, reviewed and found to be acceptable.

Health Assessments

Blush 2X Plant Growth Regulator Solution is considered to be of low acute oral, dermal and inhalation toxicity, moderately irritating to the eye, non-irritating to the skin and not a dermal sensitizer.

Occupational risk to individuals is acceptable when the Blush 2X Plant Growth Regulator Solution is used according to label directions. Precautionary, personal protective equipment and directions for use statements on the product label aimed at mitigating user exposure are adequate to protect individuals from any potential risk due to occupational exposure.

Bystander exposure will not result in health risks of concern when the product is used according to label directions. Consequently, the risk to bystanders and individuals in residential areas is acceptable.

There are no dietary (food or drinking water) concerns when the product is used according to label directions.

Maximum Residue Limit

As part of the assessment process prior to the registration of a pesticide,

Health Canada must determine that the consumption of the maximum amount of residues that are expected to remain on food products when a pesticide is used according to label directions will not be a concern to human health. This maximum amount of residues expected is then legally specified as a Maximum Residue Limit (MRL) under the *Pest Control Products Act* (PCPA) for the purposes of adulteration provision of the *Food and Drugs Act* (FDA). Health Canada specifies science-based MRLs to ensure the food Canadians eat is safe.

The specification of an MRL under the *PCPA* is not required.

Environmental Assessment

The uses are within the currently registered use pattern of the active ingredient and therefore, no increase in exposure to the environment is expected when Blush 2X Plant Growth Regulator Solution is used according to label directions. The label includes the required environmental precautions and hazards statements.

Value Assessment

Value information submitted for review consisted of precedent registrations in Canada and the US and data from field research trials. This information demonstrated that an application of Blush 2X Plant Growth Regulator Solution per the label instructions enhanced the colour development of red apples and that DA meter readings could be used as a reliable indicator for the first application timing.

The registration of Blush 2X Plant Growth Regulator Solution provides users another product for colour enhancement of red apples with more flexibility to choose an application rate based on their orchard environmental conditions and apple varieties. It also allows users to use DA meter readings as a reliable indicator to determine the first application timing.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided and has found it sufficient to support the registration of Blush 2X Plant Growth Regulator Solution.

References

PMRA Document Number	References
3142797	2016, Validation of [CBI-removed] for the quantitative determination of the a.i. in FAL 1820, DACO: 3.4.1 CBI
3142798	2016, Physical and Chemical Properties of FAL 1820, DACO: 3.5.1,3.5.2,3.5.3,3.5.6,3.5.7,3.5.8,3.5.9
3142799	2017, Physical and Chemical Properties of FAL 1820: Storage Stability for up to 52 weeks at 20 °C stored in 1 litre fluorinated HDPE bottles., DACO: 3.5.10,3.5.14

3142800 2019, FAL 1820 Physical/chemical testing, DACO: 3.5.12,3.5.8
3142802 2019, Report, DACO: 3.5.13
3142813 2020, Blush 2X manufacturing process, DACO: 3.2 CBI
3142815 2020, Blush 2X method, DACO: 3.4 CBI
3142816 2020, Blush 2X phys-chem summary, DACO: 3.5
3228619 2021, Blush 2X Plant Growth Regulator Solution phys/chem doc, DACO: 3.5.5
2385869 U.S. EPA Office of Pesticide Programs Biopesticides and Pollution Prevention
Divison, 2013, Prohydrojasmon (PDJ) PC Code: 028000, DACO: 12.5
3142791 2016, FAL 1820: Acute oral toxicity in the rat - fixed dose method, DACO: 4.6.1
3142792 2016, FAL 1820: Acute dermal toxicity (limit test) in the rat, DACO: 4.6.2
3142793 2016, FAL 1820: Acute eye irritation in the rabbit, DACO: 4.6.4
3142794 2016, FAL 1820: Acute dermal irritation in the rabbit, DACO: 4.6.5
3142795 2016, FAL 1820: Local lymph node assay in the mouse - individual method,
DACO: 4.6.6
3142796 2016, FAL 1820: Acute inhalation toxicity (nose only) study in the rat, DACO:
4.6.3
3142818 2020, Blush 2X use description summary, DACO: 5.2
3142819 2020, Blush 2X PGR efficacy summary, DACO: 10.1, 10.2.1, 10.2.2, 10.2.3.1,
10.2.3.3, 10.3.1, and 10.3.2.

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