

## Evaluation Report for Category B, Subcategory 2.1, 2.3, 2.4, 3.11, 3.12 Application

**Application Number:** 2020-5728  
**Application:** New End-Use Product Chemistry – Guarantee, Identity and Proportion of Formulants;  
New Product Labels – New Pests and New Site or Host  
**Product:** DART Fungicide  
**Registration Number:** #####  
**Active ingredients (a.i.):** Capric Acid and Caprylic Acid  
**PMRA Document Number:** 3359879

### Purpose of Application

The purpose of this application was to register a new end-use product, DART Fungicide, for suppression or control of certain fungal diseases on grapes and highbush blueberries.

### Chemistry Assessment

DART Fungicide is formulated as an emulsifiable concentrate containing capric acid at a concentration of 28.3 % and caprylic acid at a concentration of 41.7 %. This end-use product has a density of 0.96 g/mL and pH of 3.23 (1% solution). The required chemistry data for DART Fungicide have been provided, reviewed and found to be acceptable.

### Health Assessments

DART Fungicide is of low acute oral, dermal, and inhalation toxicity, moderately irritating to the eyes, slightly irritating to the skin, and is not a dermal sensitizer.

Occupational exposure to individuals handling DART Fungicide is expected to result in acceptable risk when the product is used according to label directions. Precautionary and personal protective equipment statements on the product label aimed at mitigating worker exposure are considered adequate to protect individuals from any potential risk due to occupational exposure.

Exposure risks to bystanders are acceptable when the product is used according to label directions. Health risks to individuals in residential areas are considered acceptable 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 an MRL under the *Pest Control Products Act* for the purposes of adulteration provision of the *Food and Drugs Act*. Health Canada specifies science-based MRLs to ensure the food Canadians eat is safe.

Dietary risk to humans from the use of caprylic acid and capric acid on agricultural and non-agricultural crops is acceptable due to the low toxicity profile of caprylic acid and capric acid. Therefore, the specification of MRLs, under the *Pest Control Products Act*, will not be required for caprylic acid and capric acid.

## **Environmental Assessment**

No additional risk to the environment is expected from the registration of DART Fungicide when label directions are followed.

## **Value Assessment**

Value information was submitted in the form of efficacy data generated in 16 field trials in which DART Fungicide was applied at one or more rates ranging from 0.25 to 0.5% v/v. In ten trials conducted on wine grape or juice (table) grape, disease severity data demonstrated that DART Fungicide applied at 0.25-0.35% v/v can be expected to control powdery mildew and downy mildew and suppress phomopsis fruit rot on grape. The disease severity data from the six highbush blueberry trials demonstrated that DART Fungicide applied at the same rate can be expected to control monilinia twig blight and mummy berry. The higher concentration of 0.35% v/v was more effective than 0.25% v/v in multiple trials under higher disease pressures. No injury to grape or highbush blueberry was detected in any of the field studies.

The availability of DART Fungicide for use on grape and highbush blueberry will present growers with a new option to manage economically important diseases in both crops while helping to mitigate the risk of resistance development to conventional fungicides.

## **Conclusion**

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information sufficient to support the registration of DART Fungicide.

## References

<b>PMRA Document Number</b>	<b>Reference</b>
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3177696	2020, 3.5.10 - Accelerated Storage Stability - Dart Fungicide, DACO: 3.5.10 CBI
3230693	2016, BioLink Herbicide: Development and Validation of an Analytical Method, DACO: 3.4.1 CBI
3345860	2022, 3.2.2 Formulation Process for BioLink Fungicide Final Formula, DACO: 3.2.2 CBI
3177697	2020, Toxicology Summary, DACO: 4.1
3177698	2020, Dart Fungicide Acute Oral Toxicity (UDP) in Rats, DACO: 4.6.1
3177699	2020, Dart Fungicide Acute Dermal Toxicity in Rats, DACO: 4.6.2
3177700	2020, Dart Fungicide Acute Inhalation Toxicity in Rats, DACO: 4.6.3
3140831	2020, Dart Fungicide Acute Eye Irritation in Rabbits, DACO: 4.6.4
3177701	2020, Dart Fungicide Acute Dermal Irritation in Rabbits, DACO: 4.6.5
3177702	2020, Dart Fungicide, Dermal Sensitization, DACO: 4.6.6
3177715	2020, Use Description-Scenario, DACO: 5.2
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3177719	2019, HEL0119 2019 - Westbridge Grape Powdery Mildew Trial XF-17001, DACO: 10.2.3.4
3177723	2019, MIL0119 Evaluation of fungicides for control of diseases in Niagara grapes, 2019, DACO: 10.2.3.4
3177724	2019, MIL0219 Evaluation of fungicides for control of powdery mildew in wine grapes, 2019, DACO: 10.2.3.4
3177725	2019, MIL0319 Evaluating fungicides for control of mummy berry in blueberries, 2019, DACO: 10.2.3.4
3177729	2018, PSC0118 Evaluation of fungicides for management of mummy berry, 2018, DACO: 10.2.3.4
3177730	2016, SCH0116 Evaluating fungicides for control of Botrytis blossom blight and fruit rots in blueberries, 2016, DACO: 10.2.3.4
3177731	2017, SCH0117 Evaluation of fungicides for control of powdery and downy mildew in wine grapes, 2016, DACO: 10.2.3.4
3177732	2018, SCH0118 Evaluating fungicides for control of mummy berry in blueberries, 2018, DACO: 10.2.3.4
3177733	2016, SCH0216 Evaluation of fungicides for control of powdery and downy mildew in wine grapes, 2016, DACO: 10.2.3.4
3177734	2017, SCH0217 Evaluating fungicides for control of mummy berry in blueberries, 2017, DACO: 10.2.3.4
3177736	2017, SCH0317 Evaluation of fungicides for control of powdery and downy mildew in wine grapes, 2017, DACO: 10.2.3.4
3177738	2016, SCH0416 Evaluating fungicides for control of mummy berry and post-harvest fruit rot in blueberries, DACO: 10.2.3.4

- 3206603 2020, Evaluating fungicides for control of mummy berry in blueberries, 2020  
DACO: 10.2.3.3
- 3206604 2020, Evaluation of fungicides for control of disease in Niagara grapes, 2020  
DACO: 10.2.3.3
- 3206605 2020, Evaluation of fungicides for control of powdery mildew and botrytis on  
wine grapes, 2020, DACO: 10.2.3.3

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