

## Evaluation Report for Category B, Subcategory 2.3, 2.4 Application

**Application Number:** 2017-1451  
**Application:** New End-Use Product Chemistry – Identity of Formulants and Proportion of Formulants  
**Product:** Cornerstone Surfactant  
**Registration Number:** 33232  
**Active ingredients (a.i.):** Surfactant blend  
**PMRA Document Number :** 2887209

### Purpose of Application

The purpose of this application was to register Cornerstone Surfactant, an adjuvant product to be used with herbicide products.

### Chemistry Assessment

Cornerstone Surfactant is formulated as an emulsion containing a surfactant blend at a nominal concentration of 100%. This end-use product has a density of 1.005-1.025 g/mL and pH of 3.20. The required chemistry data for Cornerstone Surfactant have been provided, reviewed and found to be acceptable.

### Health Assessments

Cornerstone Surfactant is considered to be of low acute oral, dermal and inhalation toxicity in rats. It is considered to be minimally irritating to the eye and skin of the rabbit. It is not considered to be a dermal sensitizer.

Cornerstone Surfactant in combination with the end-use products for use on food, feed and non-crop land is not expected to result in increased potential occupational or bystander exposure over the registered uses of the end-use products. No health risks of concern are expected when workers follow label directions and wear the personal protective equipment as stated on the label.

No residue data were submitted to support the registration of Cornerstone Surfactant (containing 100% surfactant blend). The use rates of Cornerstone Surfactant do not exceed the registered use rate of the non-ionic adjuvants, crop oil concentrates or wetting agents currently listed on each tank-mix partner label. When it is used together with end-use products containing various active ingredients, no change in the magnitude of residues is expected in animal and food commodities. Therefore, dietary exposure to these active ingredients is not expected to increase, and will not pose an unacceptable risk to any segment of the populations, including infants, children, adults and seniors.

## **Environmental Assessment**

The use of Cornerstone Surfactant is not expected to increase environmental risk when compared to other registered products for similar use patterns. Statements on the label are sufficient to mitigate environmental risk.

## **Value Assessment**

The registration of Cornerstone Surfactant will provide users an additional option to select a surfactant based on price and availability.

The formulation of Cornerstone Surfactant was compared to the formulations of two similar products. It was concluded that the differences in the formulations among these products were unlikely to result in any significant impact on product performance when they are included in the spray solution of the listed pest control products and crop desiccants.

Value information, which included data from small-scale replicated field trials conducted in the Prairies in 2016, demonstrated that efficacy of Cornerstone Surfactant plus one of the following herbicides, Refine SG, Pursuit, Bullwhip 240 EC, and Yuma GL, for control of their respectively labelled weeds was comparable or greater than that of the similar products plus the same herbicides at the same rates.

Crop injury to the crops included in the field trials, including spring wheat, lentil, soybean, and field pea, with Cornerstone Surfactant plus one of these herbicides was comparable to that with the similar products plus the same herbicide, respectively, at the same rates. The observation on crop injury was collaborated with yield data from spring wheat and field pea trials.

Overall, the registration of Cornerstone Surfactant for use as a penetrating surfactant with listed herbicides and insecticides and as a harvest aid for use with listed crop desiccants is supported from a value standpoint.

## **Conclusion**

The Pest Management Regulatory Agency has completed an assessment of the available information and can support the registration of Cornerstone Surfactant.

## **References**

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