Sunflower

Variety Name: KLE0019B
Experimental Designation:

1. Origin & Breeding History: KLE0019B is a linoleic, tribenuron-methyl tolerant, oilseed maintainer line developed by the pedigree and backcross method of selection from the cross KLM8101B*5/KHE8123B. KLM8101B is a proprietary linoleic, imidazolinone tolerant maintainer that has been described and previously approved by the NSVRB. KHE8123B is a high oleic tribenuron-methyl tolerant, proprietary line with preferred agronomic characteristics, previously approved by the NSVRB.

   The pedigree and backcross method of selection was used for the development of KLE0019B. It is a bulk of BC4F7 plants tracing back to a single BC4F6 plant. Selection was based on uniform plant type, self compatibility, seed size, seed color, and tolerant to tribenuron-methyl herbicide.

2. Areas of Probably Adaptation: Hybrids utilizing KLE0019B are adapted to sunflower growing regions of North America, and SE Europe: the hybrids will be primarily for vegetable oil.

3.1	Flowering	Medium 5		
3.2	Height (relatively short, medium or tall?):	Medium 5		
3.3	Branching Type:	Select One		
3.4	Distal Leaf Shape:	Broad Triangular 5	3.14 Leaf Serration:	Coarse 7
3.5	Leaf Attitude:	Low 3	3.15 Leaf Blistering:	Medium 5
3.6	Leaf Color:	Dark Green 7	3.16 Ray Flower Color:	Light Yellow 2
3.7	Ray Flowers:	Medium 5, Broad Ovate 3, Longitudinal Recurved 2, Long 7	3.17 Stigma Anthocyanin:	Absent 1
			3.18 Pappi Color:	Green 1
3.8	Disk Flower Color:	Select One	3.19 Head (neck) Attitude:	half-turned down with curved stem 5
3.9	Pollen Color:	Yellow 2	3.20 Seed Shape:	Elongated 1
3.10	Head Shape:	Flat 3	3.21 Seed Thickness:	Thin 3
3.11	Seed Outer Pericarp Color:	Black 7	3.22 Hypocotyl Anthocyanin:	Absent 1, Select One
3.12	Stripe Appearance:	On margin: None or very weakly expressed 1, between margin: None or very weakly expressed 1, Grey 2		

3.13 State expected variants or other varietal information not described above (if none, state "none"). None.

4. Disease & Insect Resistance. KLE0019B is tolerant to tribenuron-methyl herbicide.

5. Procedures for Maintaining Seed Stock: Breeders seed will be maintained by Nuseed Americas in nursery rows under bags, or by open pollination in isolated fields. Up to two generations beyond breeders seed will be allowed for the production of foundation seed. Isolation and other requirements will be in accordance with the seed certification regulations of the state where it is produced.

6. Certified Seed Availability & Publication of Certified Seed Production. 2024, do not publish certified production acreage.

7. PVP Information. No plan for PVP at this time. Do not provide information to the PVP database.

Date this application was submitted: 10/15/2024 Date recommended by the VRB: _____