Principal® Forte /

HERBICIDE

Technical Information Sheet

A new & exciting post-emergence herbicide for use on both forage & grain maize. It controls a wide range of both grass and broad-leaved weeds with few following crop restrictions.

Key facts						
Product Registration Number:	MAPP No. 20797					
Active Ingredient:	541.58 g/kg dicamba + 62.47g/kg nicosulfuron + 31.25 g/kg rimsulfuron + 31.25 g/kg isoxadifen-ethyl safener (HRAC Group 4 and 2 Herbicides)					
Pack Size:	2.4 kg (treats 5 ha). 4 packs in a case.					
Formulation:	Water Dispersible Granule (WDG)					
Crops:	Forage and grain maize					
Maximum Individual Dose:	480 g/ha					
Maximum Total Dose:	480 g/ha					
Timing:	From 2 up to and including 9 leaves unfolded (GS12-19) Apply between 1st May and 31st July					
Water Volumes:	200-400 l/ha					
Spray Quality:	Medium/coarse as defined by BCPC					
Buffer Zone:	5 m, reducible to 1m if a dry ditch					
Rainfastness:	4 hours					

Best use advice

- Principal Forte contains nicosulfuron and rimsulfuron, sulfonylurea (ALS inhibitor) herbicides and dicamba (phenoxy)
 herbicide, all of which work mainly by contact action and are most effective if applied when the weeds are small and
 actively growing.
- Must be applied with an adjuvant that is classified as 95.0% w/w oil (rapeseed triglycerides), i.e. Codacide. Or with Vivolt at 0.2% v/v.
- Good spray coverage of the weeds must be obtained for best results. Susceptible plants cease growth almost immediately after application and symptoms can be seen from two weeks after application.
- Weed control may be reduced when soil conditions are very dry.
- Principal Forte should not be applied to any crop suffering from stress as a result of drought, waterlogging, low temperatures, pest or disease attack, nutrient or lime deficiency or other factors reducing crop growth. Applications to stressed crops may lead to incidences of persistent crop damage.
- Transient yellowing and/or crop stunting may be seen from 1-2 weeks after treatment, this is quickly outgrown and has no impact on yield.
- Weeds germinating after treatment may not be adequately controlled.
- Do not use Principal Forte on crops undersown with grasses, clover or other legumes or any other broad-leaved crop.
- To avoid subsequent injury to other crops, all spraying equipment must be thoroughly cleaned using a proprietary tank cleaner.

Following crops

- In a normal rotation only winter cereals can be drilled in the same calendar year of application. It is recommended to
 plough first, although if there is a sufficient gap of 90 days from application to planting, the need to plough can be
 removed
- Ryegrass is also a supported following crop and can be planted without concern.
- Spring cereals, ryegrass, maize, OSR, potato, sugar beet, peas or beans can be planted in the spring following application.



Crop failure

• In the event of crop failure only maize and cereals can be planted after a period of at least 75 days after application. It is recommended to plough first.

Weed spectrum

• The susceptibility rating of weeds in the following table are from the cotyledon to 4-leaf stage with good spray coverage and growing conditions using Principal Forte at 480 g/ha + recommended adjuvant. Weeds germinating after treatment may not be adequately controlled.

Grass weeds											
Black-grass		S up to 4TL	Crab/Hairy finger grass			MS up to 2TL		Millet		S up to 4TL	
Bent spp.		S up to 4TL	Fescue spp.			S up to 4TL		Ryegrass		S up to 4TL	
Brome spp.		S up to 4TL	Green bristle grass/Foxtail			S up to 6TL		Volunteer cereals		S up to 4TL	
Cockspur/ Barnyard Grass		S up to 6TL	Meadow grass, annua			S up to 4TL		Wild oats		S up to 4TL	
Couch		S up to 6TL									
Broad-leaved weeds											
Amaranth, common		S up to 4TL	Field pennycre	ess	S up to 4TL		Red dead nettle		e	S up to 4TL	
Bindweed, black		S up to 4TL	Groundsel		S up to 4TL		Redshank		S up to 4TL		
Bindweed, field		S up to 4TL	Knotgrass	Cnotgrass		MS S		Shepherd's purse		S up to 4TL	
Charlock		S up to 4TL	Mayweed		S	S up to 4TL		Sow thistle		S up to 4TL	
Chickweed		S up to 4TL	Nettle, small		S up to 4TL		Speedwell			S up to 4TL	
Cleavers		S up to 4TL	Nightshade, black		S up to 4TL		Thistle, creeping (seed)		MS		
Cranesbill		MS	Orache		S	S up to 4TL TI		Thorn apple		S up to 4TL	
Dock seedlings		-	Pale persicaria		S	S up to 4TL V		Volunteer potatoes			
Fat hen		S up to 4TL									
Susceptible				Moderately susceptible - No						data	

Key: Label weeds in bold. TL - True leaves, - no data

Non-label weed information based on anecdotal or limited data and is only indicative and should not be considered as a recommendation for use on the part of Corteva Agriscience. The user assumes full responsibility for use on the weeds.

Application and mixing guidance

- Half fill the spray tank with clean water and start the agitation.
- · Pour in the required amount of Principal Forte.
- Rinse any empty containers thoroughly and add rinsings to the spray tank.
- Where tank mixes are used, and unless directed otherwise, the preferred order of addition of products to the spray tank is
 as follows: water dispersible granules, wettable powders, suspension concentrates (flowables), emulsifiable concentrates,
 solution concentrates. Each product should be added separately to the half-full sprayer and be fully dispersed before the
 addition of the next product.
- · Add the remainder of the water.
- Finally, add the required amount of adjuvant and continue agitation.
- Maintain agitation until spraying is completed.
- · Spray solution MUST be used on the day of mixing and must NOT be left overnight.
- Follow manufacturer recommendations regarding correct use of the induction bowl.

A full range of tank mix partners supported with Principal Forte, including mixes with Starane Hi-Load HL can be found on our website at https://www.corteva.co.uk/tools-and-advice/tank-mix.html or for more information call or email the hotline.

