



Ground Force

AN ENVIRONMENT IMPACT PRODUCT

Ground Force is a soil conditioner adjuvant formulated to be applied with residual soil applied pesticides.

Reduces the negative environmental impact of soil applied pesticide

Providing maximum efficiency of residual soil herbicides even in adverse weather conditions.

Improves coverage of treated surface by limiting fine spray droplets.

Moves herbicide quickly into the soil to prevent volatilisation or photo-degradation.

Fixes the herbicide in the top 5cm of the soil layer.

Helps to prevent phytotoxicity effects on sensitive crop roots.

**WEED GERMINATION LAYER
HERBICIDE + GROUND FORCE**

CROP GERMINATION LAYER

Ground Force gets the herbicide to where it needs to be and keeps it there.



- Providing maximum efficiency of residual soil herbicides even in adverse weather conditions such as heavy rain.
- Increases the protective period of herbicides within the soil
- Improves coverage of treated surface by limiting fine spray droplets
- Moves herbicide quickly into the soil to prevent volatilisation or photo-degradation
- Fixes the herbicide in the top 5cm of the soil layer, which is where majority of weeds grow out from, so that the weeds encounter maximum active material and efficacy is increased.
- Ground Force helps to prevent phytotoxicity effects on sensitive crop roots by limiting the herbicide that penetrates below the 5cm 'active' herbicide layer of soil and into the main root zone.

Description

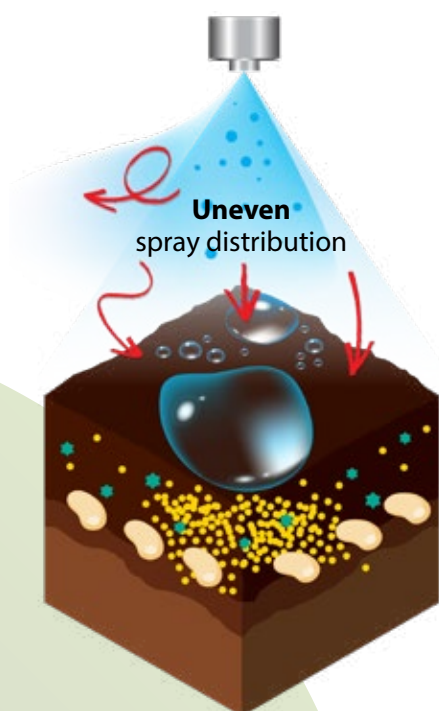
Ground Force is a soil conditioner adjuvant formulated to be applied with residual and pre-emergent soil applied pesticides. Ground Force helps to get the pesticide into the target area of the soil and then also helps to keep it there to maximise control and prevent unwanted damage to crops.

Active Ingredients

Combination of paraffinic hydrocarbons, non-ionic surfactants, oils and sticking agents.

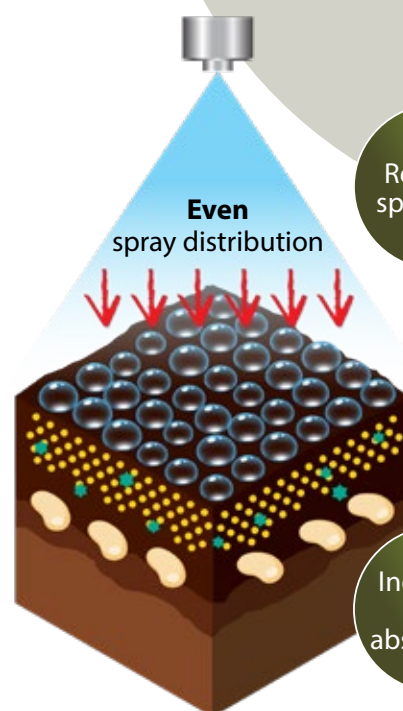
Mode of Action:

Herbicide alone



Herbicide moves off soil particles with moisture and leaches out of active zone.

+ **f** Ground Force



Herbicide remains in top zone of soil profile.

Reduced spray drift

Increased soil absorption





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Pre-em herbicides efficacy and level of weed control is directly linked to efficient application. Ground force reduces spray drift and gives improved deposition and coverage on to the soil. It gets the herbicide into the soil quickly so reduces chance for photodegradation. Once in the soil, the long chain oil-based chemistry in Ground Force helps to fix or bind the herbicide in the top layer of the soil. This keeps the herbicide in the same area as the weed seeds and prevents it from moving deeper to where the crop seeds are planted. This reduces the potential for phytotoxicity to the crop seeds and maximises effect on the weeds.

Field Trials

– Ukraine 2018, Corn. Light sandy soil with heavy rain after planting.

Untreated field had significant herbicide damage as can be seen by the darkened leaf tips. Herbicide has leached down to the crops developing root zone.



Treated Field. Same location, planting time and rainfall. No damage to leaves.



Applications

Pre emergent herbicides are most effective when there is adequate moisture in the soil.

We recommend to work with an agronomist to match best herbicide, adjuvant, rates and timing.

Recommended Dosage

In Autumn/Winter conditions where moisture is present to spray a lower rate of 0.2L/Ha

In Spring/Summer increase to 0.3-0.4L/Ha when conditions are dryer or rainfall less likely.

For best coverage use coarse/medium nozzles for quality of spray to avoid spray droplets and drift.

Rates are not affected by spray water volume.

Timing: Can be applied to all crops immediately after sowing or early stages of growth

Target Soils: Can be used on all soil types where a pre emergent application is suitable

Mixing: Always start with a clean sprayer. Add half the quantity of water to the spray tank and start agitation. Add Ground Force at the recommended quantity of herbicide and rest of the water. Maintain agitation throughout.

Examples of some Herbicides to use with Ground Force	
Acetochlor	Clomazone
Diflufenican	Flufenacet
Imazamox	Linuron
Metazachlor	Metribuzin
Pendimethalin	Prosulfocarb
Promethrin	Quinmerac
Tri-allylate	

Target Crops	
Sunflower	Soya
Winter & Spring Cereals	Maize
Oilseed Rape	Peas
Linseed	Beans
Potatoes	Sugar beet
Vegetables	

Feature	Benefit
On target application and retention: Less drift, less leaching	Reduced Environmental impact
Maximum herbicide efficacy	Value for Money
Increased weed control	Harvesting gains, yield gains
Reduced Phytotoxicity to crop seeds	The crop potential is increased

Active Substance:

Combination of paraffinic hydrocarbons, non-ionic surfactants, specialist food grade oils and modern sticking agents.



3 Litres / 5 Litres / IBC