

FMC	KEY MESSAGE	CROPS	KEY WEEDS	RESIDUAL CONTROL
AIM® EC Group 14	A flexible tank-mix partner for enhanced burnoff	Barley, buckwheat, canola, chickpea, corn (field & sweet), dry bean, faba bean, field pea, flax, lentil, millet (pearl & proso), mustard, oats, potato, rye, safflower, soybean, sunflower, triticale, wheat (spring, durum & winter)	Black nighsthade, eastern black nightshade, lamb's quarters, morning glory, red root pigweed, tall waterhemp, velvetleaf, flixweed, hairy nightshade, Pennsylvania smartweed, pigweed (prostrate, smooth, tumble), purslane, round-leaved mallow, stinkweed, tansy mustard, waterhemp (tall, common), carpetweed, cleavers, cocklebur, jimsonweed, kochia, Russian thistle, shepherd's purse, volunteer canola, burclover, corn spurry, prickly lettuce, venice mallow	No
Authority® 480 Group 14	Extended control of tough broadleaf weeds	Chickpeas, field peas, flax, sunflower, soybeans, tame mustard, faba beans. New 2021 - spring wheat, durum wheat (low rate only)	Kochia, cleavers ^s , common groundsel, common purslane, common waterhemp, eastern black nightshade, lamb's quarters, large crabgrass, powell pigweed, red root pigweed, smooth crabgrass, wild buckwheat, yellow woodsorrel	Yes
Authority® Supreme Groups 14 & 15	Get 2-in-1 pre-emergent protection against grassy and broadleaf weeds	Field peas, chickpeas, soybeans	Barnyard grass, brome (downy, Japanese), crabgrass (large, smooth), foxtail (green, yellow, giant), witchgrass, wild oats ^s , cleavers, common groundsel, common purslane, common ragweed ^s , cow cockle, eastern black nightshade, kochia, lamb's quarters, pigweed (green, red root and Powell), stinkweed, waterhemp (common), wild buckwheat, wild mustard ^s , yellow woodsorrel	Yes
Command® 360ME Group 13	Your first line of defense against cleavers in canola	Canola	Cleavers ^E	Yes
Command® Charge Groups 13 & 14	A stronger, more complete burnoff before canola, plus weeks of extended cleaver control	All herbicide tolerant canola	Command® charge A – cleavers ^E Command® charge B – lamb's quarters (common), morning glory, nightshade (black), nightshade (eastern black), red root pigweed, velvetleaf, tall waterhemp, flixweed, round-leaved mallow, morning glory, tansy mustard, hairy nightshade, field pennycress (stinkweed), pigweed (prostrate, smooth, tumble), common purslane, Pennylvania smartweed, tall waterhemp, common waterhemp, volunteer canola, carpetweed, cocklebur, jimsonweed, kochia, shepherd's purse, Russian thistle	Yes - for cleavers
Express® FX Groups 2, 4 & 9 when mixed with glyphosate	Proactive resistance management with uncompromising burnoff performance	Wheat (spring, durum, winter) Barley, Oats	**Canada fleabane, common ragweed, kochia (including Group 2 & 9 resistant biotypes), narrow-leaved hawk's beard, scentless chamomile ^s , dandelion, downy brome, flixweed, giant foxtail, green foxtail, hemp-nettle, lady's thumb, lamb's quarters, Persian darnel, red root pigweed, Russian thistle, stinkweed, volunteer barley, volunteer canola (including glyphosate tolerant), volunteer flax, volunteer wheat, wild mustard, wild oats, cow cockle, wild buckwheat, Canada thistle ^s , white cockle ^s	No

^{• -} Requires moisture for activation **E** - Extended control **S** - Suppression only

[&]quot;When tank mixed with 0.5 L/ac glyphosate equivalent

⁺ Injury to crops and forages may occur on coarse-textured soils, low in organic matter (less than 3%), or in fields with variable soils, gravelly areas, sandy areas, or eroded knolls. Avoid planting in soils containing more than 50% sand.



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Express® PRO Groups 2 & 9 when mixed with glyphosate	Professional strength burnoff with extended control	Wheat (spring, durum, winter), barley	**Canada fleabane, cleavers ^E , common ragweed, kochia, narrow-leaved hawk's beard, scentless chamomile, night flowering catchfly ^S , dandelion, downy brome, flixweed, giant foxtail, green foxtail, hemp-nettle, kochia (except Group 2 & 9 resistant biotypes), lady's thumb, lamb's quarters, Persian darnel, red root pigweed, Russian thistle, stinkweed, volunteer barley, volunteer canola (including glyphosate tolerant), volunteer flax, volunteer wheat, wild mustard, wild oats, cow cockle, wild buckwheat, Canada thistle ^S , white cockle	Yes
Express® SG Groups 2 & 9 when mixed with glyphosate	Excellent burnoff weed control with maximum cropping flexbility	Wheat (spring, durum, winter), oats, lentils¹, chickpeas¹, alfalfa¹, red clover¹, alsike clover¹ (seed or forage production), smooth bromegrass¹, meadow bromegrass¹, timothy¹, creeping red fescue¹, canary seed, dry bean, faba bean, field peas, lupin, soybean	**Canada fleabane, common ragweed, narrow-leaved hawk's beard, scentless chamomile, dandelion, downy brome, flixweed, giant foxtail, green foxtail, hemp-nettle, kochia (except Group 2 & 9 resistant biotypes), lady's thumb, lamb's quarters, Persian darnel, red root pigweed, Russian thistle, stinkweed, volunteer barley, volunteer canola (including glyphosate tolerant), volunteer flax, volunteer wheat, wild mustard, wild oats, cow cockle, wild buckwheat, Canada thistles, white cockles	No
Focus® Groups 14 & 15	Extended control of toughest grassy and broadleaf weeds with a unique mode of action	Spring wheat, winter wheat, lentils, field corn, soybean	Barnyard grass, cleavers, common waterhemp, downy brome, green foxtail, yellow foxtail, giant foxtail¹, foxtail barley⁵, green pigweed, Italian ryegrass, Japanese brome, kochia⁵, lamb's quarters⁵, large crabgrass, red root pigweed, stinkweed⁵, velvetleaf, wild buckwheat¹, wild mustard¹, wild oats⁵, wormseed mustard	Yes
Intruvix® Groups 2, 4, 14 & 9 when mixed with glyphosate	Intruvix® herbicide plus glyphosate provides farmers the only 4 modes of action cereal burnoff to battle resistant weeds	Wheat (spring, durum, winter), barley, oats	Canada fleabane, Canada thistle ^s , cleavers, common ragweed, cow cockle, dandelion, downy brome, flixweed, giant foxtail, green foxtail, hemp-nettle, kochia (including Group 2 & 9 resistant biotypes), lady's thumb, lamb's quarters, morning glory, narrow-leaved hawk's beard, eastern black nightshade, black nightshade, Persian darnel, red root pigweed, Russian thistle, scentless chamomile ^s , stinkweed, velvetleaf, volunteer canola (including glyphosate tolerant), volunteer flax, volunteer barley, volunteer wheat, tall waterhemp, white cockle ^s , wild oats, wild buckwheat, wild mustard	No

^{**}When tank mixed with 0.5 L/ac glyphosate equivalent

[†] Injury to crops and forages may occur on coarse-textured soils, low in organic matter (less than 3%), or in fields with variable soils, gravelly areas, sandy areas, or eroded knolls. Avoid planting in soils containing more than 50% sand.



Please see labels for complete crop listings, weed listings (including weed size specifications), and rates.

GOWAN	KEY MESSAGE	CROPS	KEY WEEDS	RESIDUAL CONTROL
Avadex® MicroActiv® Group 15	Avadex® is a Group 15 mode of action, a powerful tool to help combat Group 1 and 2 resistant wild oats. Avadex also has residual activity helping to control flushing wild oats. This granular herbicide can be applied spring or fall and is ideal for zero and minimum tillage fields.	Spring wheat, durum wheat, barley, canary seed, flax, canola, mustard, dry peas, sugar beets.	Wild oats	6 to 8 weeks
Avadex® Liquid EC Group 15	Avadex® is a Group 15 mode of action, a powerful tool to help combat Group 1 and 2 resistant Wild Oats. Avadex also has residual activity helping to control flushing wild oats. This liquid herbicide is suited for conventional tillage fields, as contact with black soil at time of application will directly impact how effective weed control is.	Spring wheat, durum wheat, barley, flax, canola, mustard, dry peas, sugar beets, red root.	Wild oats	6 to 8 weeks
Fortress® MicroActiv® Groups 3 & 15	Fortress® brings 2 modes of action, Group 3 and Group 15, to help the battle against resistant wild oats. As well as control of flushing wild oats, Fortress has activity on other grasses and broadleaf weeds. This granular herbicde can be used spring or fall and can be applied in any tillage system including zero and minimum tillage systems.	Spring wheat, field corn	Control of wild oats, green and yellow foxtail. Supression of kochia, wild buckwheat, lamb's quarters, red root pigweed, and Russian thistle	No
Insight® 339 SC Group 14	Insight® 339 SC is a new non-selective contact herbicide used in a pre-emergent burndown application in spring wheat and field corn. Insight is also registered for use in non-crop and fallow. Powered by Tergeo®, Insight® delivers ultra-fast burndown of emerged weeds when and where it's needed.	Wild oats, kochia, red root pigweed, lamb's quarters, wild buckwheat, volunteer canola	Wild oats, kochia, red root pigweed, lamb's quarters, wild buckwheat, volunteer canola	
Edge® MicroActiv® Group 3	This new formulaton of Edge® is a powerful Group 3 mode of action to help combat Group 2, 4, and 9 resistant weeds that are becoming more prevalent across the prairies, as well as offering residual control. Edge® MicroActiv® can be applied spring or fall in any tillage system to help keep pulse and canola fields clean.	Canola, lentils, peas, dry beans, faba beans, yellow mustard, hemp, chickpeas, soybeans, sunflowers, alfalfa (establishment)	Green and yellow foxtail, barnyard grass, wild oats ^s , kochia, wild buckwheat, red root pigweed, lamb's quarters, cleavers ^s , and more	6 to 8 weeks
Treflan® Liquid EC Group 3	Treflan Liquid EC® is a lower cost Group 3 that is strong on some weeds but does not have the broad spectrum control of Edge®. This liquid herbicide is suited for conventional tillage fields, as contact with soil at application timing will directly impact how effective weed control is.	Canola, dry beans, faba beans, field peas, flax, lentils, mustard, sunflowers. alfalfa (establishment)	Green foxtail, yellow foxtail, barnyard grass, wild oats ^s , wild buckwheat, chickweed, lamb's quarters, pigweed, and more	6 to 8 weeks

Light incorporation moves products into soil moisture, no additional precipitation required for activation.

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NUFARM	KEY MESSAGE	CROPS	KEY WEEDS	RESIDUAL CONTROL
Valtera™ EZ Group 14	Valtera™ EZ is a pre-emergent soil active herbicide for early season broadleaf weed control in pulses, wheat, and soybeans. Now available in a convenient liquid formulation.	Chickpeas, field peas, lentils, soybeans, wheat	Annual sow thistle, chickweed, dandelion (seedling), green foxtails, kochia (including Group 2-, 4-, and glyphosate-resistant biotypes), lamb's quarters (Group 2-, 5- and glyphosate resistant biotypes), pigweeds, Russian thistles, volunteer canolas, and wild buckwheats	Up to 8 weeks
Fierce® EZ Groups 14 & 15	Fierce® EZ pre-emergent herbicide delivers broad-spectrum, extended soil active weed control on emerging spring broadleaf and grass weeds for up to 8 weeks after activation in pulses, wheat, and soybeans.	Chickpeas, field peas, lentils (fall application only), soybeans, spring wheat	Chickweed, green foxtail (including Group 1- and 2-resistant biotypes), kochia (Group 2-, 4-, and glyphosate-resistant biotypes), lamb's quarters, red root pigweed, volunteer canola ^s , wild buckwheat, wild mustard, and many more.	Up to 8 weeks
Conquer® II Groups 14 & 6	CONQUER® II pre-seed herbicide adds more power to your glyphosate for burndown ahead of seeding canola.	Canola, barley, canary seed, corn, fall rye, triticale, oats, summerfallow, wheat (spring, durum, winter)	Weeds controlled when tank-mixed with glyphosate - Annual sow thistle ^s , chickweed, cleavers (including Group 2- and glyphosate-resistant biotypes), cow cockle ^s , dandelion (spring germinated), flixweed, kochia (including Group 2-, 4-, and glyphosate-resistant biotypes), lamb's quarters (including Group 2-, 5- and glyphosate-resistant biotypes), narrow-leaved hawk's beard ^s , night-flowering catchfly, pineapple weed ^s , red root pigweed (including Group 2- and 5-resistant biotypes), shepherd's purse, stinkweed, volunteer canola (all herbicide-tolerant biotypes), wild buckwheat, and wild mustard	No
GoldWing® Groups 14 & 4	GoldWing® herbicide is an effective pre-seed burndown option with multiple modes of action, for use before seeding pulses, cereals, flax corn and canary seed.	Barley. canary seed, chickpeas, corn, faba beans, field peas, flax, lentils, oats, rye, triticale, wheat (spring, durum, winter)	Weeds controlled when tank-mixed with glyphosate - Annual sow thistle ^s , Canada thistle, cleavers (including Group 2- and glyphosate-resistant biotypes), cow cockle, dandelion (suppression), kochia (including Group 2-, 4- and glyphosate-resistant biotypes), lamb's quarters (including Group 2- and 5-resistant biotypes), mustards (except dog and tansy), narrow-leaved hawk's beard (spring germinated), night-flowering catchfly, red root pigweed (including Group 2- and 5-resistant biotypes), round-leaved mallow, stinkweed, shepherd's purse, smartweed, volunteer canola (all herbicide tolerant biotypes), and wild buckwheat	No

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NUFARM	KEY MESSAGE	CROPS	KEY WEEDS	RESIDUAL CONTROL
BlackHawk ® Groups 14 & 4	BlackHawk® pre-seed herbicide enters the heat of the battle with fast, flexible, and complete broadleaf weed control ahead of cereals, soybeans, and corn.	Barley, canary seed, field corn, oats, rye (spring, fall), soybeans, summerfallow, triticale, wheat (spring, winter, durum)	Weeds controlled when tank-mixed with glyphosate - Canada thistle, cleavers (including Group 2- and glyphosate-resistant biotypes), cocklebur, cow cockles, dandelion (spring seedling and season long suppression), flixweed, kochia (including Group 2-, 4-, and glyphosate-resistant biotypes), lamb's quarters (including Group 2- and 5-resistant biotypes), mustards (except dog and tansy), narrow-leaved hawk's beard (including Group 2-resistant biotypes), night-flowering catchfly, pigweeds (red root and Russian), prickly lettuce, Russian thistle, shepherd's purse, sow thistle, stinkweed, sweet clover, volunteer canola (including all herbicide-tolerant biotypes), wild buckwheat (suppression), and wild radish	No
Thunderhawk ™ Group 14, 4 & 2	ThunderHawk™ herbicide energizes preseed burndown with glyphosate ahead of cereals in the black soil zone. With three modes of action, it delivers fast-acting control on a wide spectrum of broadleaf weeds and provides longer residual activity on volunteer canola.	Barley, oats, wheat (spring and winter)	Annual sow thistle, Canada thistle, cleavers (including Group 2- and glyphosate-resistant biotypes), chickweed, cow cockle, dandelion, flixweed, hemp-nettle, kochia (including Group 2-, 4-, and glyphosate-resistant biotypes), lamb's quarters (including Group 2- and 5-resistant biotypes), mallow, mustards (except dog and tansy), narrow-leaved hawk's beard, night-flowering catchfly, red root pigweed (including Group 2- and 5-resistant biotypes), stinkweed, shepherd's purse, smartweed, volunteer canola (all herbicide-tolerant biotypes), wild buckwheat, wild mustard (including Group 2-resistant biotypes)	No

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BASF	KEY MESSAGE	CROPS	KEY WEEDS	RESIDUAL CONTROL
Voraxor® Complete Groups 14 & 15	The most consistent pre-seed burndown on the market, with outstanding residual activity for an effective one-two punch to start the season. Three actives in a high-performance herbicide: new Tirexor, trusted Kixor for burndown control and Zidua® SC for residual activity. Broad-spectrum control including activity on grassy weeds. Enhanced residual activity on key broadleaf weeds.	Field corn, field pea, lentil, soybean	Wild buckwheat, volunteer canola, dandelion, flixweed, green foxtail, kochia, lamb's quarters, wild mustard, narrow-leaved hawk's beard, red root pigweed, wild oat	Yes
Voraxor® Group 14	Next level pre-seed burndown and residual control of weeds in pulses. Voraxor herbicide delivers enhanced preseed burndown with residual suppression of broadleaf weeds at higher labeled rates in peas, lentils, corn, soybeans, wheat, and barley and includes the innovative new active Tirexor.	Barley, chickpea, field corn, sweet corn, field pea, lentil, soybean, wheat	Volunteer canola, wild buckwheat, dandelion, flixweed, kochia, lamb's quarters, wild mustard, narrow-leaved hawk's beard, stinkweed	Suppression at the high rate
Smoulder® Group 14 & 2	New, superior control of broadleaf weeds in a pre-seed application to start the season with cleaner fields. Post-emergence burndown of emerged weeds and residual pre-emergent control of secondary flushes of volunteer canola prior to seeding wheat and barley. Provides control of tough winter annual and perennial weeds when applied as a tank mix with glyphosate. Burndown control of resistant broadleaf weeds including Group 2-, 4-, and 9-resistant biotypes of kochia.	Barley, durum wheat, spring wheat, winter wheat	Volunteer canola, wild buckwheat, dandelion, kochia, lamb's quarters, wild mustard, narrow-leaved hawk's beard, stinkweed, cleavers, Canada thistle	in new products

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BASF	KEY MESSAGE	CROPS	KEY WEEDS	RESIDUAL CONTROL
Certitude® Group 6 & 27	To help maximize canola yield, you need to put the smackdown on weeds early. Certitude® herbicide is the pre-seed solution that provides exceptional control of challenging weeds like kochia and volunteer canola. And as the first Group 27 chemistry that's registered for pre-seed use in canola production, it also helps to mitigate herbicide resistance, sharpening your glyphosate application. Delivers exceptional pre-seed weed control of herbicide-resistant kochia and volunteer canola. And as the first Group 27 herbicide for pre-seed use in canola, it helps manage herbicide resistance.	Canola (all HT systems)	Chickweed, cleavers, cow cockle, flixweed, hemp-nettle, kochia, lady's thumb, lamb's quarters, narrow-leaved hawk's beard, red root pigweed, Russian thistle, stinkweed, volunteer canola, volunteer flax, wild buckwheat, wild mustard	No

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UPL	KEY MESSAGE	CROPS	KEY WEEDS	RESIDUAL CONTROL
Inferno™ Duo Group 2	No burndown product is more ruthless against hard-to-kill broadleaf and flushing grassy weeds in spring wheat. Two active ingredients (flucarbazone and tribenuron) working together with glyphosate to deliver added benefit on key broadleaf and grass weeds.	Spring wheat (not durum), winter wheat	'Glyphosate @ 180 gae/ac: red root pigweed, shepherd's purse, narrow-leaved hawk's beard, cleavers, Canada thistle (S), common ragweed, cow cockle, dandelion, flixweed, hemp-nettle, kochia, lady's thumb, lamb's quarters, Russian thistle, stinkweed, wild buckwheat, wild mustard, wild oat, downy brome, foxtail barley, green foxtail, giant foxtail, volunteer canola, volunteer barley, volunteer flax, volunteer wheat	No
Inferno™ Trio Group 2 & 14	With three active ingredients working together, no burndown product for wheat is more effect or delivers more value. A powerful combination of flucarbazone, florasulam, and carfentrazone provides enhanced and extended control of hard-to-kill grass and broadleaf weeds.	Spring wheat (not durum)	'Glyphosate @ 180 gae/ac: red root pigweed, shepherd's purse, eastern black nightshade, night-flowering catchfly, round-leaved mallow, common ragweed, cow cockle, dandelion, flixweed, hemp-nettle, kochia, lady's thumb, lamb's quarters, Russian thistle, stinkweed, wild buckwheat, wild mustard, chickweed, corn spurry, cleavers, narrow-leaved hawk's beard, smartweed, cocklebur, smooth pigweed, stork's bill, wild tomato, velvetleaf, carpetweed, wild oat, downy brome, barnyard grass, green foxtail, giant foxtail, Persian darnel, volunteer canola, volunteer barley, volunteer wheat	No

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ADAMA	KEY MESSAGE	CROPS	KEY WEEDS	RESIDUAL CONTROL
2,4-D ESTER	Provides reliable control of broadleaf weeds as a pre-seed option with no re-cropping restrictions when applied in the fall.	Wheat, barley, rye	Volunteer canola¹, field horsetail, Russian thistle, kochia	
EMPHASIS™	Pre-seed glyphosate partner that delivers multiple modes of action and fast burndown control of broadleaf and grasses including control of Group 2, 4, 5 and 9 resistant kochia and glyphosate-tolerant canola.	Canola, wheat, barley, oats	Volunteer canola – cot – 4 leaf, kochia– Gr 2 & 9 resistant, cleavers, narrow-leaved hawk's beard	
INVOLVE® 50 WDG	Proven tank-mix partner with glyphosate and also 2,4-D Ester for control of broadleaf and grassy weed pre-seed, in-crop, post-harvest, and summerfallow applications.	Wheat, barley, oats, durum, peas, soybeans	Dandelion, narrow-leaved hawk's beard, round-leaved mallow, wild buckwheat², white cockle, volunteer canola	
PRIORITY®	The ideal glyphosate tank-mix partner for pre-seed burnoff with proven extended control of non-Clearfield® volunteer canola and winter annuals	Wheat, barley, oats, durum	Narrow-leaved hawk's beard, wild buckwheat, volunteer canola, dandelions, scentless chamomile, cleavers	Up to 21 days
BROMOTRIL®	Tough broadleaf weed control with tank-mix flexibility and excellent crop safety.	Wheat, barley, oats	Volunteer canola (1-3 leaf stage), kochia, lamb's quarters, wild buckwheat, cow cockle, pale smartweed, field horsetail	
SQUADRON® II	This broad-spectrum herbicide is registered for grassy and broadleaf weed control in a wide range of crops, most notably lentils, field peas, and potatoes. It can work alone or in combination with recommended tank mixes.	Peas	Volunteer canola, wild mustard, stinkweed, hemp-nettle, pigweeds, lamb's quarters	