

# 2020 ENVIRONMENTAL IMPACT SHEET

## Winter wheat



1,5-3% organic matter 0,5% drift

Pesticide	Dose (kg/ha of l/ha)	Environmental Impact Points (EIP)			Pollina-tors	Natural enemies
		Water-organisms	Soil-organisms	Ground-water		
<b>Herbicide, prior to emergence</b>						
Battle Delta <sup>2</sup>	0,3	22	3	51	A	?
Defi	5	160	170	5	B	?
glyphosate 360 g/l	6	6	24	0	A	A
Helosate	4	6	16	0	A	A
<b>Herbicide, during emergence</b>						
Activus Super <sup>2</sup>	2	64	74	0	A	?
Alena <sup>1,2</sup>	1	52	13	540	B	?
Atlantis Star <sup>1</sup>	0,2	26	6	58	B	?
AZ 500 <sup>1</sup>	0,2	18	42	460	A	?
Boxer, Roxy	5	160	170	5	B	?
Cossack Star <sup>1</sup>	0,2	50	12	104	B	?
Duplosan <sup>4</sup>	1,5	0	0	270	A	?
Fence	0,5	12	3	100	A	?
Finy SG <sup>1</sup>	0,03	33	12	123	B	?
Flame <sup>1</sup>	0,03	21	0	14	A	?
Flame Duo <sup>1,5</sup>	0,06	0	0	204	A	?
Glosset SC	0,4	12	3	100	A	?
Herold SC <sup>2</sup>	0,6	43	6	102	A	?
Malibu <sup>1,2</sup>	4	65	112	100	A	?
Primus Perfect	0,2	9	42	154	B	?
Sharpen 33EC <sup>2</sup>	4	66	120	0	A	A
Sempre <sup>2</sup>	0,375	60	4	0	A	?
Sunfire	0,36	9	3	76	A	?
<b>Herbicide, from 2th to 3rd leaf stage wheat</b>						
Aurora <sup>1</sup>	0,05	7	0	0	A	?
Battle Delta <sup>2</sup>	0,3	22	3	51	A	?
Cleave	1,5	30	150	137	A	?
Daiko <sup>2</sup>	3	40	102	0	?	?
Defi	5	160	170	5	B	?
Etna Next <sup>5,6</sup>	0,6	0	2	0	A	A
Fidox 800 EC	1,5	48	51	2	B	?
Flurostar XL <sup>2</sup>	1,8	14	180	164	A	?
Fox 480 SC <sup>2</sup>	1,5	12	0	0	A	?
Pacifica Plus <sup>1,2</sup>	0,5	15	12	140	B	?
Primus	0,075	6	0	113	A	?
Saracen	0,1	9	0	150	A	?
Saracen Delta <sup>2</sup>	0,1	19	1	150	A	?
TBM 75 WG <sup>1</sup>	0,02	21	0	14	A	?
Traton	0,045	43	10	99	B	?
<b>Herbicide, from leaf stage wheat</b>						
Kart	1,8	32	198	81	A	?
Omnera <sup>1</sup>	1	95	150	110	B	?
Stomp 400 SC <sup>2</sup>	3,25	65	117	0	A	A
<b>Herbicide, from leaf stage till node stage</b>						
Capri Twin <sup>1</sup>	0,13	10	6	12	?	?
Capri	0,25	15	3	0	A	?
<b>Herbicide, spring, start regrowth crop and weeds</b>						
Capri	0,25	15	3	0	A	?

Pesticide	Dose (kg/ha of l/ha)	Environmental Impact Points (EIP)			Pollina-tors	Natural enemies	
		Water-organisms	Soil-organisms	Ground-water			
Hussar OD <sup>1</sup> 		0,2	54	17	80	B	?
<b>Herbicide, till the end of tillering wheat</b>							
Alena <sup>1,2</sup> 		1	52	13	56	B	?
Ally (SX), Accurate <sup>1</sup> 		0,03	33	12	105	B	?
Accurate <sup>1</sup> 		0,02	22	8	70	B	?
Accurate <sup>1</sup> 		0,03	33	12	105	B	?
Axial 50		0,9	1	0	0	A	?
Basagran, Bentazon Imex		2	0	4	100	A	?
Basagran SG		1,1	1	3	99	A	?
Biathlon 4D <sup>1</sup> 		0,07	39	53	280	A	?
Flurostar 200		1	20	11	2	A	?
U 46 MCPA, Agroxone MCPA <sup>1</sup> 		3,6	23	14	5.400	A	?
Duplosan MCPP		2	0	0	360	A	?
Othello <sup>1,2</sup> 		2	48	14	64	B	?
Primstar		1	30	110	92	A	?
Primus		0,075	6	0	113	A	?
Puma Extra EW		0,8	9	1	0	B	?
Spitfire		1	24	110	170	A	?
Starane top <sup>2</sup>		0,6	9	144	19	A	?
Tapir		1	20	160	92	B	?
Xanadu <sup>1,3</sup>		0,1	29	8	120	B	?
<b>Fungicide</b>							
Adexar <sup>2</sup>		2	14	100	280	A	?
Allegro <sup>1,2</sup> 		1	18	120	310	A	?
Azoxystrobin 250 g/l (several brands) <sup>1,2</sup> 		1	10	3	2	A	A
Ampera <sup>1,2</sup> 		1,5	30	56	495	B	A
Ascra Xpro		1,5	75	15	750	A	?
Aviator Xpro <sup>2</sup>		1,25	28	3	0	A	?
Azbany <sup>2</sup>		1	10	3	2	A	A
Bontima <sup>2</sup>		2	8	12	0	A	?
Bravo Premium		2	22	10	2	A	A
Buzz Ultra DF <sup>1</sup> 		0,33	86	36	594	B	A
Caramba <sup>2</sup>		1,5	25	14	0	A	?
Ceriax <sup>1,2</sup> 		3	23	102	285	A	?
Cielex <sup>1</sup> 		1,6	42	40	91	A	?
Comet		0,8	23	1	0	A	A
Contans <sup>6</sup>		2	0	0	0	?	?
Corbel <sup>5</sup>		1	0	130	15	A	B
Delaro		1	46	1	0	A	?
Diagonal		1	25	3	2	A	A
Diopyr		0,5	2	8	55	A	?
Dithane DG Newtec		2	28	108	6	A	B
Elatus Era <sup>2</sup>		1	132	6	0	?	?
Elatus Plus <sup>2</sup>		0,75	123	5	0	?	?
EpoX Extra <sup>1,2</sup> 		1,8	212	76	198	A	?
EpoX Top <sup>1,2</sup> 		2	7	72	680	B	?
Fandango		1,5	33	2	0	A	?
Faxer, Prochlorus		1	9	31	0	A	A
Flexity		0,5	4	28	0	A	?
Gigant <sup>2</sup>		1	13	2	0	A	?
Imtrex XE		2	9	0	2	A	?
Legado		1	25	3	2	A	A
Mastana SC, Penncozeb SC		4,8	46	173	10	A	B
mancozeb 75%		2	28	108	6	A	B
Mirador Xtra		1	41	6	5	A	A
Penncozeb 80 WP		2	30	114	6	A	B

Pesticide	Dose (kg/ha of l/ha)	Environmental Impact Points (EIP)			Pollina- tors	Natural enemies
		Water- organisms	Soil- organisms	Ground- water		
Nissodium	0,5	14	55	0	A	?
Opus <sup>1,2</sup> 	1	11	100	280	A	?
Opus EC <sup>2</sup> 	1,5	11	99	285	A	?
Opus Team <sup>1,2</sup> 	1	74	110	200	A	?
Osiris <sup>2</sup> 	3	32	102	255	A	?
Priaxor EC <sup>2</sup> 	1,5	14	2	3	A	?
Proline 	0,8	31	2	0	A	?
Property 180SC 	0,5	2	8	55	A	?
Prosaro <sup>1</sup> 	1	65	19	310	B	?
Prosaro Plus <sup>4</sup> 	1,25	581	4	0	B	?
Redigo 	0,22	3	0	0	A	?
Redigo Pro 	0,15	5	1	11	B	?
Retengo <sup>2</sup> 	1,25	12	1	0	A	A
Retengo Plus 	0,75	19	31	83	A	?
Rubric <sup>1,2</sup> 	1	11	100	280	A	?
Seguris 	1	11	73	200	A	?
Skyway Xpro <sup>1,2,6</sup> 	1,25	43	20	300	B	?
Soleil <sup>1</sup> 	1,2	180	20	2.040	B	A
Sportak EW 	1	9	31	0	A	A
Tarcza 250 EW, Tebucur 250 EW, Tebusha 250 EW <sup>2</sup> 	1	34	36	610	B	A
Thiovit Jet 	5	15	5	5	B	B
Tilt 250 EC 	0,5	12	1	0	A	A
Topsin M Ultra <sup>2</sup> 	1,5	0	615	195	A	A
Turret 60 <sup>2</sup> 	1,5	25	14	0	A	?
Variano Xpro <sup>2</sup> 	1,75	25	4	0	A	?
Venture <sup>5</sup> 	1,5	0	98	270	A	?
Venture N <sup>2</sup> 	2,5	12	118	325	A	?
Avella 	1,5	21	45	110	A	?
VSM Cyflufenamide 50 EW 	0,5	14	60	0	A	?
Zoxis 250 SC, Sinstar 	1	25	3	2	A	A
<b>Insecticide</b>						
Bariard <sup>2</sup> 	0,15	4	4	0	B	C
Calypso <sup>2</sup> 	0,15	4	4	0	B	C
Cyperkill 250 EC <sup>2</sup> 	0,1	15	2	0	C	C
Decis Protech 	0,5	3	6	0	B	C
deltamethrin 25 g/l 	0,25	2	5	0	B	C
Goldorak, Karate Zeon, Ninja 	0,05	100	1	0	C	C
Hinode 	0,14	0	0	0	B	A
Ironmax Pro 	7	0	0	0	A	?
Natria slug pellets 	50	0	0	0	A	?
Pirimor <sup>2</sup> 	0,25	60	6	400	B	A
Sumicidin super 	0,2	13	4	0	C	C
Sumi-Alpha 2.5 EC 	0,2	13	4	0	C	C
Talisma EC 	0,02	3	0	5	C	?
Teppeki 	0,14	0	0	0	B	A
UPL Pirimicarb <sup>2</sup> 	0,25	60	6	400	B	A
<b>Lodging</b>						
CeCeCe 	1	1	7	40	B	A
Completo 	2	1	4	30	B	?
Ephon Top 	0,75	7	23	0	A	A
Fabulis OD 	1,5	0	0	0	A	?
Medax Top 	1,5	1	5	90	A	?
Moddus DC 	0,3	0	0	0	B	?
Moddus 250 EC 	0,25	0	0	0	B	?
Moxa 	0,4	0	0	0	B	?
Next 	0,5	1	1	0	B	?

Pesticide	Dose (kg/ha or l/ha)	Environmental Impact Points (EIP)			Pollina- tors	Natural enemies
		Water- organisms	Soil- organisms	Ground- water		
Optimus	0,5	1	0	0	B	?
Ormet	0,75	5	17	0	A	A
Ormet Plus	2	5	20	32	B	A
Paket 250 EC	0,5	1	1	0	B	?
Prodax	0,75	0	0	0	B	?
Stabilan	1	1	7	40	B	A
Terplex	0,6	1	1	0	B	?
Trimaxx	0,5	1	0	0	B	?
Yatze	1,25	9	29	0	A	A
Yawl	1,5	0	0	0	A	?

Seed treatment						
Beret Gold 025 FS, Celest extra <sup>6</sup>	0,5	0	4	0	A	A
Cerall <sup>6</sup>	10 ml/ 100kg seeds	0	0	0	?	?
Difend <sup>6</sup>	0,42	0	0	67	A	A
Difend Extra <sup>6</sup>	200 ml/100 kg seeds	0	4	65	A	A
Latitude XL <sup>1,6</sup>	0,3	?	2	300	A	?
Vibrance Duo <sup>6</sup>	0,45	0	15	0	B	?

<sup>1</sup> Forbidden to use this pesticide in groundwater protection zones.

<sup>2</sup> Drift control measures apply for this pesticide: 90% drift reduction.

<sup>3</sup> Drift control measures apply for this pesticide: 95% drift reduction.

<sup>4</sup> Drift control measures apply for this pesticide: 97,5% drift reduction.

<sup>5</sup> Application only in plots which are not adjacent to surface water.

<sup>6</sup> 0% drift (soil disinfection, soil treatment, seed treatment and spot treatment).

### Read the label before application of the pesticides!

The label gives extra prescriptions (maximum dose, number of applications, etc.)

Legend								
Environmental Impact Points (EIP)		≤100 EIP		>100 and ≤1000 EIP		>1000 EIP		
Pollinators & natural enemies		Suitable in IPM		Moderately suitable		Not suitable in IPM		Effect unknown
EIP based on application in:		Spring mar - aug		Fall sept - feb				

Disclaimer
<p>This environmental impact sheet enables you to compare the impact of registered pesticides on the risk of leaching to groundwater, aquatic organisms in surface water, soil organisms and beneficial insects (pollinators and natural enemies). This sheet also provides information about the risk for the user. All scores on this sheet are derived from the Environmental Yardstick for Pesticides from the Dutch Centre for Agriculture and Environment (CLM).</p> <ul style="list-style-type: none"> <li>- The risk for aquatic organisms, soil organisms and of leaching to groundwater is given in Environmental Impact Points (EIP). A score of 100 EIP equals the environmental acceptable concentration according to the CTGB a Dutch Board for the Authorisation of Plant Protection Products and Biocides (<a href="http://www.ctgb.nl">www.ctgb.nl</a>).</li> <li>- There are drift control measures for some pesticides (see footnotes). In the EIP calculation for water organisms are lower drift percentages used. There is no environmental impact on aquatic organisms for plots without adjacent waterways. (In this case, assume 0 EIP.)</li> <li>- The risk for natural enemies (parasitic wasps, ladybirds and predatory mites) and pollinators (bees and bumblebees) is represented with a symbol. This symbol indicates the usability in integrated pest management (IPM). It is a combination of different side effects on individual beneficial organisms. More detailed information is available in the side effects databases of distributors of beneficial organisms. The information on this sheet is derived from Koppert Biological Systems (<a href="http://www.koppert.nl">www.koppert.nl</a>).</li> <li>- Excipients are not included (the EIP are estimated to be neglectable).</li> </ul>

Information
<p>This Environmental Impact Sheet is a tool to provide insight in one of the factors on which pesticide selection can be based. Pesticides that are permitted in the Netherlands can be found at <a href="http://www.pesticideyardstick.eu">www.pesticideyardstick.eu</a>.</p> <p>This Environmental Impact Sheet is one of the tools used and assessed in the international project Fairway. This project reviews current approaches and measures for protection of drinking water resources against pollution. More information: <a href="http://www.fairway-project.eu">www.fairway-project.eu</a>.</p> <p>This environmental impact sheet is made for the project Clean Water for Brabant, with the purpose to reduce the use of chemical crop protection products. This is an initiative of the Province Noord-Brabant, Brabant Water, regional water authorities Aa en Maas, De Dommel, Brabantse Delta en Rivierenland, ZLTO en RIWA Maas. More information: <a href="http://www.schoon-water.nl">www.schoon-water.nl</a>. For questions about this sheet you can go to the Clean Water Counter: T 0345 470 761.</p>

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