

Food Chain

Freedom to Trade. Freedom to Market.



ZYPAR™ on Barley: Information for Growers in Europe

Dow Agrosciences™ ZYPAR™, a mixture of Arylex™ active (halauxifen-methyl) (6 g ae/l) and Florasulam (5 g as/l), is a new herbicide for the post emergence control of broadleaf weeds in cereals and other crops. Arylex™ active is an innovative low-dose growth regulating herbicide and is the first member of a new class of synthetic auxin herbicides, the arylpicolinates. Its mode of action is effective in managing weed biotypes which are resistant to other modes of action (e.g. ALS inhibitor herbicides, glyphosate and triazine). Zypar™ provides flexibility of application (consistent weed control across variable climatic conditions), flexibility in crop rotation (rapid degradation in soil and plant tissues) and has a favourable environmental and toxicological profile.

Maximum Residue Levels (MRLs) and Import Tolerances are established for the active ingredients, halauxifen-methyl and florasulam, in export markets:

Country	MRL (mg/kg) of halauxifen-methyl for barley from globalmrl.com (18 September 2018)	MRL (mg/kg) of florasulam for barley from globalmrl.com (18 September 2018)	Estimated time (days) between final application and earliest harvest to be below MRL and meet label directions.*
EU	0.02**	0.01	50
USA	0.01	0.01	50
Canada	0.01	0.01	50
Japan	0.01	0.01	50
Codex	Will be established		

* It is important to always follow label directions, including minimum Pre Harvest Interval (PHI) days.

** MRL is higher in EU because the residue definition is the sum of halauxifen-methyl and halauxifen acid. In other countries the residue definition for MRLs is halauxifen-methyl only

MRLs and Import Tolerances are standards set by government authorities. These values serve to indicate that a crop protection product is applied in accordance with the official label and are set significantly below any toxicological threshold for dietary intake. In setting these standards, government authorities review large data packages, including residue studies conducted in fields.

The information provided herein is provided gratis, and solely as an initial reference. While Dow AgroSciences believes the information contained herein is reasonably accurate, it may not reflect the most current information on MRLs (or any other information presented). Therefore, the information is not intended to be, nor shall it be any grower's or exporter's sole and exclusive source of information on the subject matter. Any grower and/or exporter should be sure to check the specific circumstances with respect to crop protection products and crops or processed foods in the country or countries where they intend to ship such products. Because importing countries can and do change regulations on specific MRLs and other import requirements, Dow AgroSciences makes no warranty, or other representation, express or implied, as to the accuracy of any information contained herein, and cannot assume responsibility or liability for reliance on or use of this information by any grower and/or exporter in making specific product use decisions, which in all cases is the responsibility of the product user.



Food Chain

Freedom to Trade. Freedom to Market.

To offer more details on the residue profile, we present the results 32 trials conducted in Europe (South and North) on spring and winter barley:

- Following one application with 4.7-8.2 g ae/ha of Arylex™ active and 4.6-7.8 g as/ha of florasulam at growth stage BBCH 45-47, the residues in grain were below 0.01 mg/kg 50 days after the application (label Pre Harvest Interval) in spring barley and 62 days after the application (no data with shorter Pre Harvest Interval) in winter barley.

In addition the trials conducted show that the residues of Arylex™ active were all below LOD (0.003 mg/kg) in raw agricultural commodity (grain) and in processed commodities:

- flour, bran, pot barley, brewing malt, malt sprouts, spent grain and flocs, brewer's yeast, beer from barley, boiled wort, and hot trob.

Residues of florasulam in processed commodities are not expected as defined by the EFSA MRL Review: "As quantifiable residues of florasulam are not expected in cereal grains and maize grain, there is no need to investigate the effect of industrial and/or household processing."

Finally, studies have confirmed that there are no negative effects on brewery and malting processes when one application with 6 g ae/ha of Arylex active and 5 g as/ha of florasulam is made to winter barley up to BBCH 39 and to spring barley up to BBCH 45 growth stage.

Precautions

- Growers should note that suitable Maximum Residue Levels (MRLs) or Import Tolerances may not be established in all markets for produce treated with Zypar™ (Arylex™ Active + Florasulam).
- If you are growing produce for export, please confirm the latest information on MRLs, Import Tolerances, and residue definitions before using this product.
- Residue data are highly variable due to a large variety of agricultural practices and application technology. Growers that export treated crops should consider residue testing prior to shipment.
- Please contact your local sales representative for more information.

For more information

Additional information regarding MRLs is available online at the following sites:

- USA: www.epa.gov/pesticide-tolerances
- Canada: pr-rp.hc-sc.gc.ca/mrl-lrm/index-eng.php
- CODEX: www.codexalimentarius.net/mrls/pestdes/jsp/pest_q-e.jsp
- European Union: ec.europa.eu/food/plant/pesticides/max_residue_levels_en
- Global: globalmrl.com

The information provided herein is provided gratis, and solely as an initial reference. While Dow AgroSciences believes the information contained herein is reasonably accurate, it may not reflect the most current information on MRLs (or any other information presented). Therefore, the information is not intended to be, nor shall it be any grower's or exporter's sole and exclusive source of information on the subject matter. Any grower and/or exporter should be sure to check the specific circumstances with respect to crop protection products and crops or processed foods in the country or countries where they intend to ship such products. Because importing countries can and do change regulations on specific MRLs and other import requirements, Dow AgroSciences makes no warranty, or other representation, express or implied, as to the accuracy of any information contained herein, and cannot assume responsibility or liability for reliance on or use of this information by any grower and/or exporter in making specific product use decisions, which in all cases is the responsibility of the product user.