

- Federal Ministry on Food, Agriculture and Consumer Protection Germany -
Summary¹ of assessment of the new pesticide legislation
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In Germany as assessed by the BVL² the following substances are affected by the new criteria:

- Substances classified as carcinogenic (C1/C2)
 Substances of category 1 and 2 are currently not authorised in German plant protection.
- Classified as mutagenic substances (M1/M2)
 Affected by this classification is only the active ingredient carbendazim (C2), in fungicides.
- Classified as toxic substances (R1/R2)
 Toxic substances in approved pesticides include:
 - * Carbendazim (C2),
 - * Flusilazole (C2),
 - * Flumioxazine (C2),
 - * Glufosinate (C2).

The only C1 substance categorized in the CMR-criteria is the Warfarin. This rodenticide can, however, as previously be applied in bait stations, because it is not exposed to humans.

Active substance	Authorised ppp in Germany	category	In Annex I of 91/414/EWG till
Carbendazim (Fungizid)	Harvesan, Aagrano	M2/R2	31.12.2009
Glufosinat (Herbizid)	Basta, Liberty	R2	30.09.2017
Flumioxazin (Herbizid)	Sumimax, Nozomi	R2	31.12.2012
Flusilazol (Fungizid)	Harvesan, Capitan, Charisma	R2	pending European Court of Justice

Endocrine disruptors

A final evaluation of the impact in terms of endocrine disrupting (damaging the endocrine system) agents is currently not possible. Therefore binding criteria to assess endocrine harmful substances must be developed on community level.

Meanwhile, active substances which are

- * Carcinogen and toxic to reproduction (C3/R3) or

¹ http://www.bmelv.de/cln_045/nn_750588/DE/04-Landwirtschaft/Pflanzenschutz/Aktuelles/Pflanzenschutzmittelwirkstoffe,templateId=renderPrint.html

² BVL - Federal Office of Consumer Protection and Food Safety
http://www.bvl.bund.de/nn_493778/EN/Home/homepage__node.html__nnn=true

* Reproduction R3, and toxic hormone-forming organs (R3/toxic endocrine organs), can be considered harmful to the hormonal balance of humans.

Based on these criteria, the following ingredients would be affected (in the table are all the ingredients listed as R3/C3 or are classified as R3 with evidence on adverse effects on endocrine organs in animal studies. In this context of evaluation is to examine which of the observed effects as relevant to human consumption.)

Active substance	Authorised ppp in Germany	In Annex I of 91/414/EWG till
Epoxiconazol (Fungizid) (C3/R3)	Juwel Top, Juwel TT, Juwel Forte, Capalo, Opus, Juwel, Opera, Optimo, Diamant, Swing Gold, Champion, Opus Top.	31.12.2018
Ioxynil (Herbizid) (R3/tox. end. Organe)	Mextrol DP, Trioflex, Foxtril, Super, Azur, Aniten Super, Tristar	28.02.2015
Iprodion (Fungizid) (C3/R3) (Einstufung als R3 noch nicht erfolgt, könnte aber noch erfolgen)	Rovral WG, Verisan	31.12.2013
Mancozeb (Fungizid) (R3/tox. end. Organe)	Tridex DG, Ridomil Gold MZ, Acrobat T Plus WG, Curzate E M WG, Gemini, Valbon, Dithane NeoTec, Tattoo, Electis, Dithane Ultra WP, Detia Pflanzen – Pilzfrei Pilzol, Dithane Ultra Spiess-Urania, Penncozeb	30.06.2016
Maneb (Fungizid) (R3/tox. end. Organe)	Vondac DG, Trimangol	30.06.2016
Metconazol (Fungizid) (R3/tox. end. Organe)	Caramba	31.05.2017
Tebuconazol (Fungizid) (R3/tox. end. Organe)	Matador, Gladio, Pronto Plus, Magnicur Aktiv Baum-Wundverschluss, Prosaro, Bayazzo EFA, Bayer Garten Rosen-Pilzfrei Spray, Folicur EM, Folicur, Arena C, Landor CT	31.08.2019
Tepraloxydim (Herbizid) (R3/C3)	Aramo	31.05.2015

Persistent toxic substances (POPs, PBT and vPvB criteria)

In Germany, no ppp are approved for the so-called criteria POP (persistent organic pollutants). The so-called criteria PBT (persistent, bioaccumulative, toxic) and the criteria vPvB (very persistent and very bioaccumulative) applies for up to six active ingredients, although perhaps none or only some of the listed substances are concerned, depending on the final test method of persistence in the soil or sediment.

Active substance	Authorised ppp in Germany	POP/PBT/vPvB	In Annex I of 91/414/EWG till
Aclonifen (Herbizid)	Bandur	Ggf. PBT	Ja, aber noch nicht veröffentlicht, ???.2019
Bifenthrin (Arkarizid,I)	Talstar 8 SC	Ggf. PBT	Entscheidung über Aufnahme noch offen
Esfenvalerat (Insektizid)	Sumicidin Alpha EC	Ggf. PBT	31.07.2011
Metaflumizone (Insektizid)	Alverde	Ggf. PBT	Entscheidung über Aufnahme noch offen
Pendimethalin (Herbizid)	Picona, NUD 647 00 H, Stomp Aqua, Activus, Malibu, Stomp SC	Ggf. PBT	31.12.2013
Quinoxifen (Fungizid)	Juwel Forte G, Vebto Power, Fortress, Fortress 250	Ggf. vPvB	31.08.2014

Summary

In Germany four active substances would be rated as mutagenic, carcinogenic and toxic in the categories 1 and 2 by the new criteria. Based on the assumption of the still uncertain evaluation of endocrine harmful substances up to eight other substances would be affected in Germany. Six other agents regarding their environmental impacts will be affected by the new criteria altogether a total of 18 active substances; about seven percent of the currently approved in Germany are concerned.

Regarding the impact on yields in agricultural crops have several aspects need to be considered. The criteria above will be in force in the medium term, when the current authorization of active substances at EU level (see table) is reviewed. It is assumed that the chemical industry can substitute at least some of the substances in the coming years.

For minor uses significant improvements were achieved in the EU regulation.

Through the mutual recognition is assumed that approvals become more interesting for small businesses, resulting in a better situation for authorization.

Moreover, for minor use authorizations it was decided to grant longer data protection.

While it is not ruled out that in all cases the preferred or required plant will be available it can be assumed that the potential negative impact on the availability of pesticides is in a manageable level.