



TestQual, S.L.
(Proficiency Testing Schemes)

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TestQual 158 PROTOCOL
Pesticides residues (QuPPe & QuEChERS)
in White wine

Summary of changes

Changes marked with blue or highlighted blue.

Rev01 →

- Acceptance deadline of applications updated.
- Text added regarding LOQs and applications acceptance.
- More info added about subcontracting done.
- If z'-score is issued, it will be accredited and the difference against z-score will be included in the report.

· Other minor changes

Rev02 → Calendar updated

Rev03 → Calendar updated

Rev04 → Calendar updated, expected participants & new option for assigned value.

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0. GLOSARY AND ABBREVIATIONS

Text	Abbreviation
TestQual	TQ
Proficiency test	PT / P.T.
Limit Of Quantification	LOQ
Not Analysed	NA

1. INTRODUCTION

This document describes the **protocol** of the **TestQual 158** Proficiency Test (P.T.), belonging to the analysis of **Pesticides residues (QuPPe & QuEChERS)** in **White wine**.

In the present document is detailed how to start working with TestQual, send your application to participate, the statistic that will be applied and information about the evaluation report.

TestQual, S.L. is committed to maintaining confidentiality with the information of each laboratory from the beginning of the proficiency test.

2. OBJECTIVE

The objective of the **TestQual 158** Proficiency Test is to evaluate the quality and accuracy of the results sent by the participating laboratories. Because of this, proficiency testing is an essential element of laboratory quality assurance. It will help to control and detect errors in their results or methods of analysis.

3. CALENDAR

The following table shows the program for this proficiency test:

Date	Activity	Carried out by
-	Deadline to reserve PT sample. Ensured reviewing* of application.	Participants
Does not apply	Deadline to send application (acceptance depends on availability)	Participants
Week 25 (27 & 28 /Jun/22)	Sample delivery	TestQual
Week 27 (12/Jul/22)	Final date to submit results	Participants
Week 28 (15/Jul/22)	Final report (Email and/or client area)	TestQual

*Participants are requested in the application to submit their LOQ/LOQs, for PTs with multiple possible analytes, if participants analyse above a certain percentage (as described in our internal

procedure) of present/planned analytes the participation is accepted, a laboratory code is granted and sent by email to confirm the participation acceptance to the user of the TestQual's account.

The dates of this calendar might be slightly changed according to the development of the proficiency test during the year. However, any change would be notified to all participants announcing it on our website www.TestQual.com.

The **coordinator** of this proficiency test will be Jose Pedro Navarro Vicente. Any question regarding the development of the proficiency test, the application status or any other query can be consulted by email to jpnavarro@testqual.com.

4. REGISTER AND PARTICIPATION REQUEST (APPLICATION FORM)

NEW CLIENT

If your laboratory has not participated before in one of our proficiency tests you will have to register on the [REGISTER](#) form.

Once you have completed and sent the form you will have to wait until the activation of the account from the website administrator. If some more information is needed someone from our team will get in contact with you through the phone or email you used during your registration. You can find our contact data at the end of this protocol.

For those laboratories that require more than one contact per account or are in a situation not contemplated in this protocol will have to contact the organizer using the Contact tab to be instructed how to proceed.

APPLICATION FOR THE PROFICIENCY TEST

To participate in this proficiency test or be updated via email of any changes regarding this proficiency test is required to have a laboratory code. To get your laboratory code is needed to apply through the website or have it arranged by the coordinator at least 24h before the shipping of the samples.

In the Proficiency Tests Tab on our website, you will have to select the proficiency test you want to participate, by clicking its name or the shopping cart you will enter the page with general information and a summary of that proficiency test, there you can find the present document (the protocol) and the button to start the application.

If you did not log in before you will be requested to do so and then the website will require you to submit your Limit Of Quantification (LOQ) for the parameters you will study. The compounds left as NA (NOT ANALYSED) will NOT appear in the Results form and therefore will not be able to send results for those parameters through the website.

Once the application has been sent, as soon as possible, it will be checked by the website administrator, and you will be sent an email with the participation code. This code will be just known only by the organizer and the participant and will be always kept confidential, even after the proficiency test finishes.

You can check on the dashboard of your client area if an application you sent has been accepted or is still pending.

Just one application per exercise can be sent by each laboratory, being not allowed for a laboratory to participate with two different codes.

The applications of the laboratories will be studied and accepted in base of the quantification limits of the analytes of the proficiency test and if the logistics allow the sample shipping without risk of deterioration.

According to the experience, TestQual can anticipate that the number of participants of this proficiency test will be around **8-15**.

5. PREPARATION. DISTRIBUTION AND CONTROL

TestQual 158 scheme is a proficiency test based in the analysis of **Pesticides residues (QuPPe & QuEChERS)** in **White wine** that has been spiked with **standards**.

The material will be bought in an specialized shop in Spain and analysed by a subcontracted laboratory that holds the standard UNE-EN ISO/IEC 17025 into force.

The material is spiked with a solution with the analytes of the P.T., homogenised at a controlled temperature and stored in amber containers and stored in a freezer until distribution.

The distribution of samples was subcontracted to a courier previously homologated by TestQual. The main criteria being the courier's delivery time to ensure the receival of the sample is correct in the participant's facilities.

In addition to this, TestQual stablished other characteristics important for a courier like shipping management (tracking, notifications, exceptions), and ensuring the delivery conditions are proper (low breakage/lost ratio, keeping of cold chain, required documentation), always checking and evaluating they are complying with TestQual's requirements.

Before the samples are distributed, for the assessment of the homogeneity of the lot of samples prepared, ten samples from the lot will be selected randomly and analysed in duplicate by TestQual's collaborator laboratory under repeatability conditions. If the mean concentration obtained from this study is not within the planned range, the participants will be informed, and a new distribution day might be scheduled if another spiking is deemed as necessary.

For stability assessment purpose, three samples are analysed, in duplicate, before, during and at the end (once all laboratories have sent the results) of the proficiency test.

The quality controls subcontracted by TestQual, including verification of adequacy of the matrix, homogeneity/stability quality controls and any other analytical study required by TestQual will be subcontracted to an accredited laboratory in ISO/IEC 17025 into force.

In the evaluation report will be included the conclusions and if applies, any comment regarding homogeneity &/or stability. Additionally, the results of these tests and the spiking evaluation is available to all participants of this proficiency test upon request.

6. TEST MATERIAL AND SAMPLE SHIPMENT

The shipment of the test materials will take place on the date shown in the calendar, to the address provided by each laboratory in the application. Specific delivery dates can change from the scheduled dates of the calendar, but all changes will be announced both in the website and by mail to the registered laboratories.

This PT will consist in a single round in which will be sent a sample of approximately **60-100 g** of test material. The samples will be sent by courier service (MRW, FedEx, DHL or TNT, depending on the destination).

The material will be sent with materials and package that ensures the samples arrives correctly. The transit will be 1, 2 or 3 days to the destination country, depending on the location of the receiving laboratory.

The shipping conditions for this PT are:

REFRIGERATED, isothermal boxes will be used and filled with cold packs to keep the temperature controlled.

The shipping costs are not included in the price displayed on the website, which can only be seen if you are registered and logged in. To get an approximation of the shipping costs you can get your quotation by using the contact data at the end of this protocol.

A second test material can be requested date if necessary. If the package and/or the sample arrived damaged, defective, or not valid the participating laboratory will have to notify of this to the coordinator before two working days to get another sample.

Before the shipment, TestQual will send the instructions for storage and analysis via email and confirm the distribution date. You can request a paper copy to be attached to the package and/or TestQual might decide to include it in addition to have it sent by email.

From TestQual we encourage our participants to read it carefully and follow its instructions, as it can help to correctly conserve the sample and increase the reproducibility of the analysis.

You can request a digital copy of this document by letting us know through any communication channel.

7. CONCENTRATION RANGES, SIGMA OBJECTIVE AND ANALYTES

For this proficiency tests the range of concentration for the target analytes might be between **10** and **300 µg/Kg approximately**. This range is not absolute and depending on the various factors some or no analyte might be within this range. This range is given to provide participants a sense of the concentration ranges we usually work and expect in these kind of proficiency tests (combination of analyte/matrix).

The maximum concentration can vary depending on the MRL of the analytes in the matrix.

The **sigma objective ($\hat{\sigma}$)** which works in this scheme can be checked on section 9 of this protocol.

The **possible pesticides** in the White wine are from the list below:

2-Phenylphenol	Chlorthion	Diuron	Furalaxy
3,5-Dichloroaniline	Chlorthiophos	Dodine	Furathiocarb
3-Hydroxy-carbofuran	Cyanazine	Emamectin benzoate	HCH-Alpha
4,4-	Cyazofamid	B1a	HCH-Beta
Dichlorobenzophenone	Cyfluthrin	Endosulfan-alpha	HCH-Delta
Abamectin	Cymoxanil	Endosulfan-beta	HCH-Gamma (lindane)
Acephate	Cypermethrin	Endosulfan-sulfate	Heptachlor
Acetamiprid	Cyproconazole	Endrin	Heptachlor-epoxide
Acetochlor	Clethodim	EPN	Heptenophos
Aclonifen	Clofentezine	Epoxiconazole	Hexachlorobenzene
Acrinathrin	Clomazone	Etaconazole	Hexaconazole
Alachlor	Cloquintocet-mexyl	Ethion	Hexaflumuron
Aldicarb	Chlorfenson	Ethoprophos	Hexazinone
Aldicarb sulfone	Chlorotoluron	Etoxazole	Hexythiazox
Aldicarb sulfoxide	Chloroxuron	Ethiofencarb	Imazalil
Aldrin	Chlorpropham	Ethiofencarb -sulfone	Imazamethabenz-
Anthraquinone	Chlorsulfuron	Ethiofencarb - sulfoxide	methyl
Atrazine	Chlorthal-dimethyl	Etofenprox	Imidacloprid
Azaconazole	Clothianidin	Ethofumesate	Indoxacarb
Azinphos-ethyl	Coumaphos	Etrimes	Iprobenfos
Azinphos-methyl	Kresoxim-methyl	Famoxadone	Iprodione
Azoxystrobin	Crimidine	Famphur (Famophos)	Iprotovalicarb
Benalaxy	Cyanofenphos	Fenarimol	Isazofos
Bendiocarb	Cyanophos	Fenazaquin	Isocarbophos
Benfluralin	Cycloxydim	Fenbuconazole	Isofenphos
Benfuresate	Cyprodinil	Fenbutatin oxide	Isofenphos-methyl
Bentazone	Deltamethrin	Fenchlorphos	Isoproturon
Bifenthrin	Demeton-S-methyl	Fenhexamid	Lambda-Cyhalothrin
Bitertanol	Demeton-S-methyl	Fenitrothion	Lenacil
Boscalid	sulfone	Fenoxy carb	Leptophos
Brodifacoum	Desmetryn	Fenpropatrin	Linuron
Bromacil	Dialifos	Fenpropimorph	Lufenuron
Bromocyclen	Diazinon	Fenpyroximate	Malaoxon
Bromophos-ethyl	Dicaphthon	Fensulfothion	Malathion
Bromophos	Dichlofenthion	Fenthion	Mecarbam
Bromopropylate	Dichlormid	Phenthionate	Mefenpyr-diethyl
Bromoconazole	Dichlobenil	Fenuron	Mepanipyrim
Bupirimate	Diclobutrazol	Fenvalerate	Mepronil
Buprofezin	Dichlofuanid	Fipronil	Metalaxy
Butafenacil	Diclofop-methyl	Flonicamid	Metamitron
Butamifos	Dicloran	Fluazifop-P-butyl	Metazachlor
Butoxycarboxim	Dicrotophos	Fluchloralin	Methacrifos
Butralin	Dieldrin	Flucythrinate	Methamidophos
Buturon	Diethofencarb	Fludioximil	Methidathion
Cadusafos	Difenoconazole	Flufenoxuron	Methomyl
Captan	Difenoxyuron	Flumetralin	Methoxychlor
Carbaryl	Diflubenzuron	Fluometuron	Methoxyfenozide
Carbendazim	Diflufenican	Fluotrimazole	Metobromuron
Carbophenothion	Dimethenamid	Fluquinconazole	Metolachlor
Carbofuran	Dimethoate	Flusilazole	Methoprotyne
Chlorantraniliprole	Dimethomorph	Flutolanil	Metoxuron
Chlorbromuron	Dimoxystrobin	Flutriafol	Metribuzin
Chlorfenapyr	Diniconazole	Folpet	Mevinphos
Chlorfenvinphos	Dioxacarb	Fonofos	Myclobutanil
Chlormephos	Dioxathion	Formothion	Molinate
Chloroneb	Diphenylamine	Phosalone	Monocrotophos
Chloropropylate	Dipropetryn	Phosphamidon	Monolinuron
Chlorpyrifos	Disulfoton	Phosmet	Monuron
Chlorpyrifos Methyl	Ditalimfos		Napropamide

Neburon		Propetamphos	Terbufos
Nitenpyram	(methoxychlor metabolite)	Propiconazole	Terbumeton
Nitrofen		Propyzamide	Terbutylazine
Nitrothal-isopropyl	Phenmedipham	Propoxur	Terbutryn
Norflurazon	Picoxydostrobin	Prosulfocarb	Tetraconazole
Nuarimol	Piperonyl butoxide	Prothifos	Tetradifon
Ofurace	Pyraclostrobin	Pyridafenthion	Tetramethrin
Omethoate	Pyrazophos	Pyrimethanil	Terasul
op-TDE (DDD)	Pyridaben	Quinalpho	Thiabendazole
Oxadiazon	Pyrifenoxy	Quinoxifen	Thiacloprid
Oxadixyl	Pirimicarb	Quintozone	Thiamethoxam
Oxamyl	Pirimicarb-desmethyl	Rotenone	Thiodicarb
Oxamyl-oxime	Pirimiphos-ethyl	Simazine	Thiobencarb
Oxydemeton-methyl	Pirimiphos-methyl	Simetryn	Thiometon
Oxyfluorfen	Pyriproxyfen	Spinosad A+D	Tolclofos-methyl
Paclbutrazol	pp-DDE	Spirodiclofen	Triadimefon
Parathion	pp-TDE(DDD)	Spiromesifen	Triadimenol
Parathion-methyl	Prochloraz	Spiroxamine	Triazophos
Pebulate	Procymidone	Sulfotep	Trichloronate
Penconazole	Propham	Sulprofos	Tridemorph
Pendimethalin	Profenofos	Tebuconazole	Trifloxystrobin
Pentachloroanisole	Profluralin	Tebufenozide	Triflumuron
Permethrin	Promecarb	Tebufenpyrad	Trifluralin
1,1-(2,2-dichloroethylidene) bis(4-methoxybenzene)	Prometryn	Tebupirimfos	Vinclozolin
	Propachlor	Tecnazene	Yodofenfos
	Propamocarb	Teflubenzuron	Zoxamide
	Propanil	Tefluthrin	
	Propargite	Terbacil	

In addition to confidential number of pesticides from the previous list of possible pesticides this PT will include the analysis of Fosetyl-Al and glyphosate.

In this regard each participant shall report his results as the European legislation 2016/75 (...) amending Annex III from No 396/2005 (...) levels for fosetyl (...):

- “Fosetyl_Al (Sum)” will be evaluated as “Fosetyl-Al (sum of fosetyl, phosphonic acid and their salts, expressed as fosetyl)”.
- “Phosphonic Acid” as “Phosphonic acid and their salts”.
- “Fosetyl” as only “Fosetyl” (Molecular Weight=109.04 g/mol).

The results for Glyphosate will have to be reported as EU applicable legislation No 293/2013 of 20 March 2013 amending Annexes II and III to Regulation (EC) No 396/2005 (..), Glyphosate (..)

- “Glyphosate” as “Glyphosate” (MW=169.07 g/mol).

8. RESULTS EXPRESSION

Each participant laboratory must analyse the sample received according to their routine procedure and fill up the RESULTS form of its client are of the website www.TestQual.com with just one value per analyte/parameter.

The results should be expressed in **µg/Kg**. The number of significant figures and the units are to be chosen by laboratories and will be displayed in the report as received through the website.

The method used for the analysis of each compound informed should be sent when filling up the results form.

The organizer should get the results before the fixed data of the scheme.
If you have any problem logging in to your client area or submitting your results you can contact the coordinator of the PT for guidance or help.

Once the results are sent you can check if they were correctly recorded by accessing the detailed information of this proficiency test, which can be accessed in your client area.

9. STATISTICAL DESIGN

Any participant in this proficiency test can request further information or support about the statistical design that TestQual has developed.

TestQual considers as an **extreme outlier** any data which differs more than **50 %** of the average of all results reported by the laboratories, according to the Harmonize Protocol of the IUPAC. These extreme values will not be included in the calculation of the assigned value.

Once received all the results, TestQual evaluates the unimodality of all the values by Kernel test, being explained in the final report which is the followed procedure in case there is more than one distribution.

If enough valid results are provided and/or the uncertainty is negligible the assigned value (X) will be determined using the robust average of the results considered valid for statistical computing (after eliminating the extreme outliers), according to the standard ISO 13528 into force.

If the number of participants or the number of valid results does not reach a certain number and the uncertainty obtained using robust averages is not negligible, both the assigned value and the uncertainty will be calculated as the spiking/characterization done (design based on ISO 13528 into force).

This is done to evaluate the results against an independent value from the participants' results, since using a low number of results might cause a bias and to not detect action signals if required. The assigned value obtained from robust statistic is always compared to the assigned value obtained from characterization of the spiking done and depending on the situation TestQual might decide to use either of the assigned value, justifying that decision on the evaluation report.

If the consensus assigned value is not used, then the characterization of the spiking and the uncertainty will be calculated based in a suitable model and according to ISO 13528 into force.

The standard uncertainty (u_x) when the assigned value is obtained from the consensus it is calculated using robust statistics from the following formula:

$$u_x = s^*/\sqrt{p}$$

Being s^* the robust standard deviation of the data and p the number of results considered.

When the assigned value is obtained from the spiking done, the uncertainty is calculated accounting all sources of uncertainty according to our internal procedure and according to ISO 13528 into force.

The following condition must be fulfilled in order to discard the contribution of the uncertainty:

$$u_x \leq 0,3 \hat{\sigma}$$

The standard deviation for proficiency assessment, also named **target standard deviation, ($\hat{\sigma}$)**, comes from this formula:

$$\hat{\sigma} = b_i \cdot X$$

Being $b_i = \%_{DSRA} / 100$, and $\%_{DSRA}$ is the assigned relative standard deviation.

In this case, the assigned relative standard deviation is **25 %**.

This value is fixed previously by the organizer based in the experience of TestQual organizing this and similar proficiency tests.

Proficiency assessment (z-score): This **score** determines the competence and accuracy of the laboratory. It is calculated using the following formula:

$$z = (x_i - X) / \hat{\sigma}$$

Where x_i is the value reported by the laboratories, X is the assigned value, and $\hat{\sigma}$ is the target standard deviation for each analyte.

The criteria for defining the z-score values are:

	$ z \leq 2$	Satisfactory
2 <	$ z \leq 3$	Questionable
	$ z > 3$	Unsatisfactory

In case the inequation $u_x \leq 0,3 \hat{\sigma}$ is not fulfilled, the participants of the scheme will be informed in the report that the uncertainty is not negligible. For the parameters/analytes in which this situation occurs, the following calculation will be made:

$$z'-score = (x_i - X) / \sqrt{\hat{\sigma}^2 + U_x^2}$$

Where x_i is the value reported by the laboratories, X is the assigned value, $\hat{\sigma}$ is the target standard deviation for each analyte and U_x is the uncertainty of the assigned value.

The criteria for defining the z'-score values are:

$ z' \leq 2$	Satisfactory
$2 < z' \leq 3$	Questionable
$ z' > 3$	Unsatisfactory

The z'-score is a **under**estimation of the z-score, for this reason, for those analytes in which the uncertainty of the assigned value cannot be neglected and a z'-score is issued, it will be accompanied by the percentual difference against z-score, this way participants should be able to complete evaluate their performance.

The evaluation could be informative if the difference between scores surpasses the limit contemplated in our procedure. If any analyte or evaluation is informative it will be indicated in the report through marking and a legend.

False negatives: Any analyte not reported in the results that is in the sample above the limit of quantification previously established for this proficiency test by the organization and above the LOQ of the participant laboratory (**10 µg/Kg**). TestQual assigns to all false negatives a result equal to half the laboratory limit of quantitation (LOQ/2).

False positives: Those analytes reported in the results, which is not present in the test material, and is reported by the participant at concentrations higher than the limit of quantification of the P.T. (**10 µg/Kg**).

Testing for sufficient homogeneity:

Once the samples are prepared ten of them will be chosen at random and sent to be analysed by TestQual's collaborator laboratory. Once received the results, a statistical evaluation will be performed, according to the IUPAC Harmonic Protocol.

The acceptance criterion to ensure that the randomly chosen samples are homogeneous is that the square of the estimated sampling standard deviation is below the critical value for accepting proper homogeneity:

$$S_{sam}^2 < c$$

In the first place to check the criterion, S_{sam}^2 which is the estimated sampling standard deviation, was calculated from:

$$S_{sam} = \left(\frac{Vs}{2} - S_{an} \right)$$

Firstly Vs is the variance of the sums S_i :

$$Vs = \sum \frac{(S_i - \bar{S})^2}{m - 1}$$

Where S_i was obtained from the addition of each duplicate result from the homogeneity; \bar{S} is the mean of all S_i and m is the number of samples (10 samples).

And secondly S_{an}^2 , which is the experimental estimate of analytical standard deviation, is obtained following the next formula:

$$S_{an}^2 = \frac{\sum D_i}{2m}$$

where D_i is the result of the subtraction of each pair of replicates from the homogeneity and m is the number of samples.

In second place to check the criterion for sufficient homogeneity the critical value c was obtained from:

$$c = F_1 \cdot \sigma_{all}^2 + F_2 \cdot S_{an}^2$$

Being F_1 and F_2 constants with values equal to 1.88 and 1.01 respectively for 10 samples. S_{an}^2 has already been calculated and σ_{all}^2 is obtained from:

$$\sigma_{all}^2 = (0.3 \cdot \hat{\sigma})^2$$

where $\hat{\sigma}$ is the target standard deviation, which is calculated with the formula:

$$\hat{\sigma} = 0.25 \cdot \bar{X}$$

Being \bar{X} , the mean of the 20 values from the homogeneity.

Testing for sufficient stability:

Three samples will be analysed, in duplicate, before, during and at the end (once all laboratories have sent the results) of the proficiency test.

With these values, a study is performed according to the up to date SANTE guide (SANTE/12682/2019 Guidance document on analytical quality control), referred to analysis under repeatability conditions.

The acceptance criteria to ensure the samples have been stable during the whole proficiency test are the following:

$$\begin{aligned} |(X_{t1} - X_{t2}) / X_{t1}| \cdot 100 &\leq 10\% \\ |(X_{t1} - X_{t3}) / X_{t1}| \cdot 100 &\leq 10\% \end{aligned}$$

Being $|(X_{t1} - X_{tn}) / X_{t1}|$ the difference between the average of the samples analysed before, during and at the end of the proficiency test.

10. EVALUATION REPORT

Once received and statistically evaluated all of the participating laboratories results, TestQual will send a final report that summarizes the participation of each laboratory.

This final report will be received by the laboratories via e-mail in PDF format or an email notifying that the report is now available to be downloaded from the private area of each participant in www.TestQual.com.

If desired, the laboratory may request the report in paper, and it will be sent to its laboratory by mail.

In the event that a participant wishes to appeal against the assessment program performance, a written appellation must be sent by e-mail to jpnavarro@testqual.com explaining the reasons for it.

11. CONTACT

TestQual puts at your disposal any of the following means to contact our team:

Website:	Contact
Email:	jpnavarro@testqual.com
Office phone:	+34 868 94 94 86
Mobile phone:	+34 676 367 555

12. REFERENCES

TestQual Proficiency Testing Schemes are based on the following standards:

UNE-EN ISO/IEC 17043, first edition 2010-02-01. Conformity assessment- General requirements for proficiency testing.

ISO13528:2015, second edition 2015-08-01. Statistical methods for use in proficiency testing by interlaboratory comparison.

THE INTERNATIONAL HARMONIZED PROTOCOL FOR THE PROFICIENCY TESTING OF ANALYTICAL CHEMISTRY LABORATORIES

EU Pesticides database (v.2.2) Search Pesticides residues

SANTE/12682/2019, 1st January 2020, Guidance document on analytical quality control and method validation procedures for pesticides residues analysis in food and feed.

Commission Regulation (EU) 2016/75 of 21 January 2016 amending Annex III to Regulation (EC) No 396/2005 of the European Parliament and of the Council as regards maximum residue levels for FOSETYL in or on certain products

OJ L 16, 23.1.2016, p. 8–20

Commission Regulation (EU) No 293/2013 of 20 March 2013 amending Annexes II and III to Regulation (EC) No 396/2005 of the European Parliament and of the Council as regards maximum residue levels for emamectin benzoate, etofenprox, etoxazole, flutriafol, GLYPHOSATE, phosmet, pyraclostrobin, spinosad and spirotetramat in or on certain products

DO L 96 de 5.4.2013, p. 1/30

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