

## MARKS AND SPENCER POLICY

# PESTICIDE POLICY

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## 1.0 Purpose:

This policy is to be used by growers and suppliers supplying produce into the Marks and Spencer supply chain. It is designed to provide guidance on M&S pesticide requirements and should be used as a reference point for all growers and suppliers (including manufacturing), as part of their due diligence programmes and for auditors involved in the M&S **Select Farm Produce** program.

## 2.0 Scope:

This policy covers all pesticides used on produce, flowers and plants supplied either directly or indirectly to Marks & Spencer Plc.

## 3.0 Introduction:

The use of pesticides on fresh produce is still an extremely sensitive subject to reconcile. On the one hand we want to ensure we are able to provide our Customers with safe, nutritious, high quality produce, while balancing the environmental and human health concerns associated with pesticide use. Our Policy is structured to ensure that we as a leading UK retailer take all reasonable steps to ensure that pesticides are managed responsibly within our supply base.

To enable us to do this we have reviewed our pesticide lists and updated them bringing them into line with other leading private and public sector policies to achieve better protection of human health and the environment, with the rationale now focusing on Highly Hazardous Pesticides (HHPs). The HHP approach<sup>1</sup> is promoted by the UN's Food & Agriculture (FAO) and World Health (WHO) Organisations. We have decided to use this approach to identify HHPs used in our supply chains and then to reduce and phase these uses out over time where possible, replacing them with safer, preferably non-chemical, alternatives.

We recognize that Pesticides have their place in modern day agriculture and without them the economics of growing could be seriously affected. We will however work collectively with our supply-base, independent bodies and other stakeholders on developing pesticide strategies that promote good practice, minimise use and seeks other innovative alternatives to pesticides.

## 4.0 Integrated Pest Management and Pesticides:

The Global GAP and Red Tractor Assurance protocols outline the development of best practice when using pesticides for the fresh produce industry. In addition, several useful Codes of Practice already exist which explain the practical measures and systems Primary Producers and Direct Suppliers should follow when using pesticides on fresh produce. These include the Fresh Produce Consortium (FPC) Pesticide Code

<sup>1</sup> FAO webpage on Highly Hazardous Pesticides. Via:

<http://www.fao.org/agriculture/crops/core-themes/theme/pests/code/hhp/en/>

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of Practice, and the DEFRA *Code of Practice for Safe Use of Pesticides on Farms* (*'Pesticides Code of Practice'*). Marks & Spencer endorse all programmes that have Integrated Crop Management (ICM) Systems as their core objective. This M&S document is designed to avoid unnecessarily duplicating requirements already adequately described in industry protocols - instead it focuses on M&S points of difference and critical issues of brand protection.

M&S take customers' concerns seriously, openly explaining what we do and modifying practices if they are unhappy with the way we produce food. That is why we have taken a number of additional measures which go beyond industry best practices to improve our pesticide performance:-

- Pesticide residue free as a first choice (to 0.01mg/kg)
- No Pesticide residue on or above stated maximum residue levels (MRL's)
- Marks & Spencer 'Prohibited' list of hazardous pesticides
- Marks & Spencer 'Restricted' list of pesticides, where written prior consent is needed.
- Marks & Spencer 'Monitored' list of pesticides, where action is needed if a pesticide is above 50% of the stated MRL for that active.
- Engagement with stakeholders to work on the removal of Highly Hazardous Pesticides (HHP's)
- Adoption of approved alternative methods of pest & disease control

We will set challenging targets agreed with suppliers world-wide for reducing residues to below industry standards and minimising the presence of multiple residues.

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## 5.0 Legislation

These guidelines are **not** designed to include an exhaustive list of current legislation. This document will be revised from time to time, **but you must keep up to date with any changes:-**

You should make sure you obtain and understand the relevant sections of the following legislation:

- Food and Environment Protection Act 1985, (Part III Pesticides) as amended
- The Plant Protection Products Regulations 2011
- The Plant Protection Products (Sustainable Use) Regulations 2012
- EC Regulation 1107/2009 – Placing of plant protection products on the market.
- Food Safety Act 1990 (Amendment) Regulations 2004 and the General Food Regulations 2004 under EC regulation 852/2004
- The Control of Substances Hazardous to Health Regulations 1994 (COSHH)
- Certificates of Competence – the roles of BASIS and NPTC
- The Pesticides (Maximum Residue Levels in Crops, Food and Feeding Stuff) Regulations 2005
- <http://www.pesticides.gov.uk/guidance/industries/pesticides/topics/pesticide-approvals/legislation>
- [http://www.pesticides.gov.uk/legislation/MRL\\_Legislation/MRL\\_legislation\\_new.htm](http://www.pesticides.gov.uk/legislation/MRL_Legislation/MRL_legislation_new.htm) □ Plant Protection Products Regulations 1995 (PPPR) & Amendments 1996 & 1997

Active Substances banned in the European Union under Council Directive 79/117/EEC and Active Substances banned in the UK

[http://www.pesticides.gov.uk/Blue\\_Book/Annex\\_B/banned\\_and\\_non\\_authorized.htm](http://www.pesticides.gov.uk/Blue_Book/Annex_B/banned_and_non_authorized.htm)  
 □ EC Directive 91/414/EEC (Review of Active Ingredients under Regulation (EC) No 396/2005) as implemented in to UK legislation.

<http://www.pesticides.gov.uk/guidance/industries/pesticides/topics/pesticide-approvals/legislation>

<http://www.pesticides.gov.uk/guidance/industries/pesticides/topics/pesticide-approvals/legislation/fepa-and-copr>

<http://www.pesticides.gov.uk/guidance/industries/pesticides/topics/pesticide-approvals/legislation/plant-protection-product-legislation-in-the-uk>

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## 6.0 The M&S Pesticide lists:

The M&S pesticides lists are built around the human health and environmental hazard criteria for HHPs, using the criteria from the Pesticide Action Network (PAN) International HHP List (version December 2016)<sup>2</sup>. In principle, any pesticide listed in the 3 relevant international conventions relating to hazardous pesticides goes onto the M&S Prohibited List. These conventions are: the Stockholm Convention on Persistent Organic Pollutants (POPs); the Rotterdam Convention on Prior Informed Consent (PIC); and the Montreal Protocol on protecting the ozone layer. All other pesticides formerly prohibited by M&S have been kept on the Prohibited List.

For the M&S Restricted List, priority is given to pesticides with EITHER acute toxicity to humans (WHO Class 1a and 1b and the 'fatal by inhalation' classification) OR the highest level of cancer concern ('known carcinogen' categories of EU, US or global cancer hazard classifications).

HHPs with chronic health hazards (including probable carcinogens, endocrine disrupting pesticides and those linked with mutagenic and reproductive hazards) and those showing environmental persistence, bioaccumulation properties or high toxicity to bees or aquatic invertebrates are placed on the M&S Monitored List.

Numerous HHPs which qualify to be on the M&S Restricted List are in widespread use. Following feedback from supply companies, to make a workable system for producers and avoid serious economic disadvantage from a sudden restriction, the most widely used of these HHPs have been placed temporarily on the M&S Monitored List with '*Special Attention*' requirements aiming for short to medium term phase out to the restricted list, as alternatives become available.

<sup>2</sup> PAN International List of Highly Hazardous Pesticides (revised version December 2016). Available via: [http://www.pan-germany.org/gbr/project\\_work/highly\\_hazardous\\_pesticides.html](http://www.pan-germany.org/gbr/project_work/highly_hazardous_pesticides.html)

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## 6.1 M&S PROHIBITED LIST (82 pesticides + 1 formulation)

### M&S PROHIBITED LIST (82 pesticides + 1 formulation)

Includes **59** pesticides listed under international conventions, including single pesticides in PIC List Severely Hazardous Pesticide Formulations (SHPFs). PLUS **23** pesticides (marked \*) which have been eliminated from the latest PAN HHP list (December 2016 version) either because they are now classified as obsolete by FAO, or because they no longer qualify under the HHP hazard criteria for cancer concern (they are only 'possible' carcinogens). These will, however, remain on the M&S Prohibited list, as agreed by M&S and suppliers. Also included is the PIC listed SHPF mixture containing 10% carbofuran + 15% thiram + 7% benomyl.

	PROHIBITED LIST: Name of active ingredient of pesticide	CAS number	Type of pesticide	EU status	PIC	POP	Montreal Protocol	Acute Toxicity rating	Chronic toxicity rating	Environment rating
1	Acephate	30560-19-1	IN	X						•
2	Acetochlor	34256-82-1	HB	X					•	
3	Alachlor	15972-60-8	HB	X	•				•	
4	Aldicarb	116-06-3	NE; IN; AC	X	•			•		•
5	alpha-BHC; alpha-HCH	319-84-6	IN	X - Ban		•				
6	Atrazine	1912-24-9	HB	X					•	
7	Azinphos-ethyl	2642-71-9	IN; AC	X				•		•
8	Azinphos-methyl	86-50-0	IN; AC	X	•			•		•
9	beta-HCH; beta-BCH	319-85-7	IN	X - Ban		•			•	
10	Captafol	2425-06-1	FU	X - Ban	•			•	•	
11	Carbofuran	1563-66-2	IN; NE; AC	X	•			•		•
12	Carbosulfan	55285-14-8	IN; NE	X	candidate			•		•
13	Chlordane	57-74-9	IN	X - Ban	•	•			•	•
14	Chlorfenvinphos	470-90-6	IN	X				•		•
15	Cyhexatin	13121-70-5	AC	X						•

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16	DDT	50-29-3	IN	X - Ban	•	•			•	•
17	Demeton-S-methyl	919-86-8	IN; AC	X				•		•
18	Dinoterb	1420-07-1	HB	X				•	•	
19	Disulfoton	298-04-4	IN	X				•		
20	DNOC and its salts	534-52-1	IN; AC; FU; HB	X	•			•		
21	Endosulfan	115-29-7	IN; AC	X	•	•		•		
22	Ethiofencarb	29973-13-5	IN	X				•		
23	Ethylene dibromide; 1,2- dibromoethane	106-93-4	FM; NE	X - Ban	•				•	
24	Ethylene dichloride; 1,2- Dichloroethane	107-06-2	FM; IN	X - Ban	•				•	
25	Ethylene oxide	75-21-8	FM	X - Ban	•				•	
26	Fenitrothion	122-14-5	IN; AC	X					•	•
27	Fenthion (formulations candidates PIC)	55-38-9	IN	X	candidate					•
28	Fentin acetate; Triphenyltin acetate	900-95-8	FU; HB	X				•	•	
29	Fentin hydroxide; Triphenyltin hydroxide	76-87-9	FU; HB	X				•	•	
30	Fenvalerate	51630-58-1	IN; AC	X						•
31	Fluoroacetamide	640-19-7	RO	X	•			•		
32	Haloxyfop-methyl (unstated stereochemistry)	69806-40-2	HB	X					•	
33	Heptenophos	23560-59-0	IN	X				•		•
34	Hexachlorobenzene	118-74-1	FU; IN; MI	X - Ban	•	•		•	•	•

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35	Hexchlorocyclohexane; BHC mixed isomers	608-73-1	IN		•				•	
36	Lindane	58-89-9	IN; RO	X	•	•			•	•
37	Maneb	12427-38-2	FU	X					•	
38	Mercury and its compounds	7439-97-6	FU	X - Ban	•			•		
39	Methamidophos	10265-92-6	IN; AC	X	•			•		•
40	Methyl bromide	74-83-9	FU; IN; NE; HB	X			•			
41	Monocrotophos	6923-22-4	AC; IN	X	•			•		•
42	Omethoate	1113-02-6	IN; AC	X				•	•	•
43	Oxydemeton-methyl	301-12-2	IN; AC	X				•		•
44	Paraquat dichloride (liquid formulations candidate PIC)	1910-42-5	HB	X	SHPF			•		
45	Parathion	56-38-2	IN; AC	X	•			•		•
46	Parathion-methyl	298-00-0	IN; RE	X	•			•		
47	PCP; Pentachlorophenol	87-86-5	HB	X	•			•	•	
48	Permethrin	52645-53-1	IN	X					•	•
49	Phosphamidon	13171-21-6	IN; AC	X	•			•		•
50	Propoxur	114-26-1	IN	X					•	•
51	Pyrazophos	13457-18-6	FU	X						•
52	Quinalphos	13593-03-8	IN	X					•	•
53	Terbutryn	886-50-0	HB	X					•	
54	Thiometon	640-15-3	IN; AC	X				•		•
55	Trichlorfon	52-68-6	IN	X	•				•	•
56	Tridemorph	81412-43-3	FU	X					•	

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57	Trifluralin	1582-09-8	HB	X					•	•
58	Vinclozolin	50471-44-8	FU	X					•	
59	Zineb	12122-67-7	FU	X					•	
*60	2,4,5-T, butyric acid	93-80-1	HB						•	
*61	2-aminobutane; sec-butylamine	13952-84-6	FU	X						
*62	Amitraz	33089-61-1	AC; IN	X						
*63	ANTU	86-88-4	RO							
*64	Cadmium compounds	7440-70-2								
*65	Calcium arsenate	7778-44-1	HB, IN, MO, FU							
*66	Cyanazine	21725-46-2	HB	X					•	
*67	Ethion	563-12-2	AC	X						
*68	Etrifos	38260-54-7	IN	X						
*69	Mephosfolan	950-10-7	IN	X						
*70	Metolachlor	51218-45-2	HB	X						•
*71	Monolinuron	1746-81-2	HB	X						
*72	Nitrofen	1836-75-5	HB	X - Ban						
*73	Phosalone	2310-17-0	IN; AC	X						
*74	Potassium arsenite	10124-50-2 & other	HB; IN; RO							
*75	Prometryn	7287-19-6	HB	X					•	
*76	Quintozene	82-68-8	FU	X						
*77	Selenium compounds	x7782-49-2								
*78	Simazine	122-34-9	HB	X					•	
*79	Sodium arsenite	7784-46-5	HB; RO; IN; FU	X						

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	<b>PROHIBITED LIST: Name of active ingredient of pesticide</b>	<b>CAS number</b>	<b>Type of pesticide</b>	<b>EU status</b>	<b>PIC</b>	<b>POP</b>	<b>Montreal Protocol</b>	<b>Acute Toxicity rating</b>	<b>Chronic toxicity rating</b>	<b>Environment rating</b>
*80	<i>Sulphuric acid</i>	7664-93-9	DE; FU; HB; MI	X						
*81	<i>Tecnazene</i>	117-18-0	FU; PG	X						
*82	<i>Tetrachloroethane</i>	79-34-5	FM; SO							
	<b>SHPF mixture products of 10% carbofuran, 15% thiram and 7% benomyl</b>		<b>FU + IN/NE</b>		SHPF					

## Key:

AC= Acaricide	HB= Herbicide	RE= Repellant
AF = Antifoulant	HS= Herbicide Safener	RO= Rodenticide
AL = Algicide	BIO= Biopesticide	SO= Solvent
AV= Avicide	IN= Insecticide	ST= Sterilant
bp = Breakdown Product	MI= Microbiocide	SY = Synergist
DE= Defoliant	MO= Molluscicide	WP = Wood Preservative
FM= Fumigant	NE= Nematicide	? = no current pesticidal use
FU= Fungicide	PG= Plant Growth Regulator	

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## 6.2. M&S RESTRICTED LIST (48 pesticides)

All chemicals listed in the table below are classified as Restricted due to: their acute toxicity OR cancer 'hazard level 1' rating. The only exception is chlorpyrifos, which M&S is now restricting in field use.

	<b>RESTRICTED LIST: Name of active ingredient of pesticide</b>	<b>CAS number</b>	<b>Type of pesticide</b>	<b>EU status</b>	WHO Ia	WHO Ib	H330 fatal if inhaled	EPA carcinogenic	IARC carcinogenic	EU GHS carcinogenic (1A, 1B)
1	Azocyclotin	41083-11-8	AC	X			•			
2	Benomyl	17804-35-2	FU	X						
3	Blasticidin-S	2079-00-7	FU	X		•				
4	Butoxycarboxim	34681-23-7	IN; AC	X		•				
5	Cadusafos	95465-99-9	IN; NE	X		•				
6	Chlorethoxyphos	54593-83-8	IN	X	•					
7	Chlormephos	24934-91-6	IN	X	•					
8	Chlorpyrifos*	2921-88-2	IN; AC	-						
9	Chloropicrin	76-06-2	NE	X			•			
10	Creosote	8001-58-9	WP	-						•
11	Dichlorvos; DDVP	62-73-7	IN; AC	X		•	•			
12	Dicrotophos	141-66-2	IN; AC	X		•				
13	Diquat dichloride	4032-26-2	IN	-			•			
14	Edifenphos	17109-49-8	IN	X		•				
15	E-Phosphamidon	297-99-4	IN	X	•					
16	Epichlorohydrin	106-89-8	FU; IN; MI	-						•
17	EPN	2104-64-5	IN; AC	X	•					
18	Ethoprophos; Ethoprop	13194-48-4	NE; IN	-	•		•			

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	<b>RESTRICTED LIST: Name of active ingredient of pesticide</b>	<b>CAS number</b>	<b>Type of pesticide</b>	<b>EU status</b>	WHO Ia	WHO Ib	H330 fatal if inhaled	EPA carcinogenic	IARC carcinogenic	EU GHS carcinogenic (1A, 1B)
19	Famphur	52-85-7	IN	-		•				
20	Fenamiphos	22224-92-6	NE	-		•	•			
21	Fenbutatin-oxide	13356-08-6	AC	X			•			
22	Fenchlorazole-ethyl	103112-35-2	HS	-						•
23	Fenprothrin	39515-41-8	IN; AC	X			•			
24	Flucythrinate	70124-77-5	IN	X		•				
25	Formaldehyde	50-00-0	FU; ST	X					•	
26	Formetanate	22259-30-9	IN; AC	-		•	•			
27	Furathiocarb	65907-30-4	IN	X		•	•			
28	Isoxathion	18854-01-8	IN	X		•				
29	Magnesium phosphide	12057-74-8	IN	-			•			
30	Mecarbam	2595-54-2	IN; AC	X		•				
31	Methidathion	950-37-8	IN; AC	X		•				
32	Nicotine	54-11-5	IN	X		•				
33	Paraffin oils; mineral oils	64741-88-4	IN	-						•
34	Phorate	298-02-2	IN	X	•					
35	Potasan	299-45-6	IN	-			•			
36	Propetamphos	31218-83-4	IN	X		•				
37	Pyrazoxon	108-34-9	?	-			•			
38	Sulfotep	3689-24-5	IN; AC	X	•					
39	TCMTB	21564-17-0	FU	X			•			
40	Tebupirimifos	96182-53-5	IN	-	•					
41	Terbufos	13071-79-9	IN	X	•					
42	Thiofanox	39196-18-4	IN	X		•				

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	<b>RESTRICTED LIST: Name of active ingredient of pesticide</b>	<b>CAS number</b>	<b>Type of pesticide</b>	<b>EU status</b>	WHO Ia	WHO Ib	H330 fatal if inhaled	EPA carcinogenic	IARC carcinogenic	EU GHS carcinogenic (1A, 1B)
43	Tolyfluanid	731-27-1	FU; AC	X			•			
44	Triazophos	24017-47-8	IN; AC	X		•				
45	Vamidothion	2275-23-2	IN; AC	X		•				
46	zeta-Cypermethrin	52315-07-8z	IN	-		•				
47	Ziram	137-30-4	FU; RE	-			•			
48	Z-Phosphamidon	23783-98-4	IN	-	•					

\* field use only

Key:

AC= Acaricide	HB= Herbicide	RE= Repellant
AF = Antifoulant	HS= Herbicide Safener	RO= Rodenticide
AL = Algicide	BIO= Biopesticide	SO= Solvent
AV= Avicide	IN= Insecticide	ST= Sterilant
bp = Breakdown Product	MI= Microbiocide	SY = Synergist
DE= Defoliant	MO= Molluscicide	WP = Wood Preservative
FM= Fumigant	NE= Nematicide	? = no current pesticidal use
FU= Fungicide	PG= Plant Growth Regulator	

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### 6.3. MONITORED LIST (12 Special Attention pesticides + 155 pesticides)

The Marks & Spencer Monitored List includes twelve 'Special Attention' pesticides, which all qualify by their acute toxicity hazard to be on the Restricted List. These have been put on the Monitored List in recognition of their current use in several cropping systems and countries, to enable suppliers to continue use in the medium term but highlighting the need for additional requirements on how they are used.

	<b>MONITORED LIST: Name of active ingredient of Pesticide</b>	<b>CAS number</b>	<b>Type of pesticide</b>	<b>EU status</b>	<b>Acute toxicity</b>	<b>Chronic health effects</b>	<b>Environmental hazards</b>
SP1	Abamectin	71751-41-2	AC; IN	-	H330 - Fatal if inhaled		Highly toxic to bees
SP2	Beta-cyfluthrin; Cyfluthrin	68359-37-5	IN	-	H330 - Fatal if inhaled WHO Ib - Highly hazardous		Highly toxic to bees
SP3	Bromoxynil	1689-84-5	HB	-	H330 - Fatal if inhaled		
SP4	Chlorothalonil	1897-45-6	FM	-	H330 - Fatal if inhaled	EPA prob likel carc	
SP5	Copper (II) hydroxide	20427-59-2	FU	-	H330 - Fatal if inhaled		Very toxic to aquatic organism Very persistent in water, soil or sediment
SP6	Diquat dibromide	85-00-7	HB; DE	-	H330 - Fatal if inhaled		
SP7	Lambda-cyhalothrin	91465-08-6	IN	-	H330 - Fatal if inhaled	Endocrine disruptor	Highly toxic to bees
SP8	Methiocarb	2032-65-7	IN; MO; RE	-	WHO Ib - Highly hazardous		Highly toxic to bees
SP9	Methomyl	16752-77-5	IN	-	WHO Ib - Highly hazardous		Highly toxic to bees
SP10	Mevinphos	7786-34-7	IN; AC	X	WHO Ia - Extremely hazardous		Highly toxic to bees
SP11	Oxamyl	23135-22-0	IN; NE	-	H330 - Fatal if inhaled		Highly toxic to bees
SP12	Tefluthrin	79538-32-2	IN	A - exp 12/2021	WHO Ib - Highly hazardous		Highly toxic to bees

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1	1,3-dichloropropene	542-75-6	NE;HB	X	•								
2	2,4-DB	94-82-6	HB	-					•				
3	Acrinathrin	101007-06-1	AC	-									•
4	Alanycarb	83130-01-2	IN	X									•
5	Amisulbrom	348635-87-0	FU	-							•	•	
6	Amitrole	61-82-5	HB	X					•				
7	Anthraquinone	84-65-1		X	•								
8	Azafenidin	68049-83-2	HB	X				•					
9	Azamethiphos	35575-96-3	IN	X									•
10	Bendiocarb	22781-23-3	IN	X									•
11	Benfuracarb	82560-54-1	IN; NE	X									•
12	Bensulide	741-58-2	HB	X									•
13	Benthiavalicarb-isopropyl	177406-68-7	FU	-	•								
14	Bifenthrin	82657-04-3	IN; AC	-					•				•
15	Bioresmethrin	28434-01-7	IN	X									•
16	Borax; Borate salts	1303-96-4	HB; IN	-				•					
17	Boric acid	10043-35-3	IN	X				•	•				
18	Bromoxynil heptanoate	56634-95-8	HB	-						•		•	
19	Bromoxynil octanoate	1689-99-2	HB	-						•		•	
20	Butachlor	23184-66-9	HB	X	•								
21	Butocarboxim	34681-10-2	IN	X									•
22	Carbaryl	63-25-2	IN; PG	X	•				•				•

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23	Carbendazim	10605-21-7	FU	X			•	•					
24	Chinomethionat; Oxythioquinox	2439-01-2	AC; FU	X	•								
25	Chlorantranilprole	500008-45-7	IN	-							•	•	
26	Chlorfenapyr	122453-73-0	IN; AC	X									•
27	Chlorfluazuron	71422-67-8	IN	X						•		•	
28	Chlorotoluron	15545-48-9	HB	-					•				
29	Chlorpyrifos* (Indoor use)	2921-88-2	IN; AC	-									•
30	Chlorpyrifos-methyl	5598-13-0	IN; AC	-									•
31	Climbazole	38083-17-9		-									•
32	Clothianidin**	210880-92-5	IN	Future Ban									•
33	Cyflufenamid	180409-60-3	FU	-	•								
34	Cyhalothrin	68085-85-8	IN	X									•
35	Cyhalothrin, gamma	76703-62-3	IN	-									•
36	Cypermethrin	52315-07-8	IN; AC	-									•
37	Cypermethrin, alpha	67375-30-8	IN	-									•
38	Cypermethrin, beta	65731-84-2		-									•
39	Daminozide	1596-84-5	PG	-	•								
40	Deltamethrin	52918-63-5	IN	-					•				•
41	Diafenthiuron	80060-09-9	IN; AC	X									•
42	Diazinon	333-41-5	IN; AC	X		•							•
43	Diclofop-methyl	51338-27-3	HB	-	•								
44	Dimethoate	60-51-5	IN; AC	-									•

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45	Dimoxystrobin	149961-52-4	FU	-					•		•	•	
46	Dinocap	39300-45-3	FU; AC	X				•					
47	Dinotefuran	165252-70-0	IN	X									•
48	Disodium octaborate anhydrous	12008-41-2	IN										
49	Disodium octaborate tetrahydrate	12280-03-4	IN, FU	X				•					
50	Diuron	330-54-1	HB	-	•								
51	Epoxiconazole	133855-98-8	FU	-	•			•	•				
52	Esfenvalerate	66230-04-4	IN	-									•
53	Ethirimol	23947-60-6	FU	X									•
54	Ethylene thiourea	96-45-7	Breakdown Product - used in the manufacture of FUs		•			•	•				
55	Etofenprox; Ethofenprox	80844-07-1	IN	-							•	•	•
56	Fenarimol	60168-88-9	FU	X					•				
57	Fenazaquin	120928-09-8	AC	-									•
58	Fenoxycarb	72490-01-8	IN	-	•								•
59	Fipronil	120068-37-3	IN	-									•
60	Fluazifop-butyl	69806-50-4	HB	-				•					
61	Fluazolate	174514-07-9	HB	X						•		•	

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62	Flufenoxuron	101463-69-8	IN	X						•		•	
63	Flumetralin	62924-70-3	PG	-						•		•	
64	Flumioxazin	103361-09-7	HB	-				•					
65	Flusilazole	85509-19-9	FU	X				•					
66	Fluthiacet-methyl	117337-19-6	HB	-	•								
67	Folpet	133-07-3	FU	-	•								
68	Fosthiazate	98886-44-3	NE	-									•
69	Furilazole	121776-33-8	FU	-	•								
70	Glufosinate-ammonium	77182-82-2	HB	-				•					
71	Halfenprox	111872-58-3	AC; IN	X						•		•	
72	Hexaflumuron	86479-06-3	IN	X									•
73	Hexythiazox	78587-05-0	AC; IN	-	•								
74	Imazalil	35554-44-0	FU	-	•								
75	<b>Imidacloprid**</b>	138261-41-3	IN	Future Ban									•
76	Imiprothrin	72963-72-5	IN	-									•
77	Indoxacarb	173584-44-6	IN	-									•
78	Ioxynil	1689-83-4	HB	X					•				
79	Iprodione	36734-19-7	FU; NE	-	•								
80	Iprovalicarb	140923-17-7	FU	-	•								
81	Isopyrazam	881685-58-1	FU	-	•						•	•	
82	Isoxaflutole	141112-29-0	HB	-	•								
83	Kresoxim-methyl	143390-89-0	FU	-	•								
84	Linuron	330-55-2	HB	X				•	•				

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85	Lufenuron	103055-07-8	IN	-						•	•	•	
86	Malathion	121-75-5	IN; AC	-		•							•
87	Mancozeb	8018-01-7	FU	-	•				•				
88	Mepanipyrim	110235-47-7	FU	-	•								
89	Metaflumizone	139968-49-3	IN	-									•
90	Metam-potassium	137-41-7	FU; IN; HB; NE	-	•								
91	Metam-sodium	137-42-8	FU; IN; HB; NE	-	•				•				
92	Methabenzthiazuron	18691-97-9	HB	X									•
93	Methoxychlor	72-43-5	IN	X					•				
94	Metiram	9006-42-2	FU	-	•				•				
95	Metribuzin	21087-64-9	HB	-					•				
96	MGK 326	136-45-8	RE	-	•								
97	Milbemectin	51596-10-2	IN	-									•
98	Molinate	2212-67-1	HB	X					•				
99	MON 4660; AD 67	71526-07-3	HB Safener	-	•								
100	Naled	300-76-5	IN; AC	X									•
101	Nitenpyram	150824-47-8	IN	X									•
102	Nitrapyrin	1929-82-4	MI	-	•								
103	Nitrobenzene	98-95-3	Major precursor to aniline	-				•	•				

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104	Oryzalin	19044-88-3	HB	-	●								
105	Oxadiazon	19666-30-9	HB	-	●								
106	Oxyfluorfen	42874-03-3	HB	-	●								
107	Phenthoate	2597-03-7	IN	X									●
108	Phosmet	732-11-6	IN	-									●
109	Picloram	1918-02-1	HB	-				●					
110	Pirimicarb	23103-98-2	IN	-	●					●	●		
111	Pirimiphos-methyl	29232-93-7	IN	-									●
112	Prallethrin	23031-36-9	IN	-									●
113	Procymidone	32809-16-8	FU	X	●			●					
114	Profenofos	41198-08-7	IN	X									●
115	Profoxydim	139001-49-3	HB	-				●					
116	Propachlor	1918-16-7	HB	X	●								
117	Propargite	2312-35-8	AC	X	●					●		●	
118	Propyzamide	23950-58-5	HB	-	●								
119	Prothiofos	34643-46-4	IN	X						●		●	
120	Pymetrozine	123312-89-0	IN	-	●								
121	Pyraclofos	77458-01-6	AC	X									●
122	Pyraflufen-ethyl	129630-19-9	HB	-	●								
123	Pyrazachlor	6814-58-0	FU	-	●								
124	Pyridaben	96489-71-3	AC; IN	-									●

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125	Pyridalyl	179101-81-6	IN	-						•	•	•	
126	Pyridiphenthion	119-12-0	IN; AC	X									•
127	Quinoclamine	2797-51-5	AL; HB	-									•
128	Quinoxifen	124495-18-7	FU	-						•		•	
129	Quizalofop-p-tefuryl	119738-06-6	HB	-				•					
130	Resmethrin	10453-86-8	IN	X	•				•				•
131	Rotenone	83-79-4	IN	X									•
132	Sedaxane	874967-67-6	FU	-	•								
133	Silafluofen	105024-66-6	IN	X				•					•
134	Sodium dimethyl dithio carbamate	128-04-1	FU	X	•								
135	Spinetoram	187166-15-0	IN	-									•
136	Spinosad	168316-95-8	IN	-									•
137	Spirodiclofen	148477-71-8	AC; IN	-	•								
138	Sulfoxaflor	946578-00-3	IN	-									•
139	Temephos	3383-96-8	IN	X									•
140	Tepraloxydim	149979-41-9	HB	X					•				
141	Terrazole; Etridiazole	2593-15-9	FU	-	•								
142	Tetrachlorvinphos	22248-79-9	IN	X	•								•
143	Tetraconazole	112281-77-3	FU	-	•								
144	Tetramethrin	7696-12-0	IN	X									•
145	<b>Thiacloprid</b>	111988-49-9	IN	-	•								
146	<b>Thiamethoxam**</b>	153719-23-4	IN	Future Ban									•

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147	Thiodicarb	59669-26-0	IN	X	●								●
148	Thiophanate-methyl	23564-05-8	FU	-	●								
149	Thiram in formulations with benomyl and carbofuran	137-26-8	FU	-					●				
150	Tolfenpyrad	129558-76-5	IN	X						●		●	
151	Tralomethrin	66841-25-6	IN	X									●
152	Tri-allate	2303-17-5	HB	-							●	●	
153	Triflumizole	99387-89-0		-				●					
154	Validamycin	37248-47-8	FU	X									●
155	XMC	2655-14-3	IN	X									●

\* indoor uses only

\*\* Neonicotinoids actives subject to European Ban

Key:

AC= Acaricide	HB= Herbicide	RE= Repellant
AF = Antifoulant	HS= Herbicide Safener	RO= Rodenticide
AL = Algicide	BIO= Biopesticide	SO= Solvent
AV= Avcide	IN= Insecticide	ST= Sterilant
bp = Breakdown Product	MI= Microbiocide	SY = Synergist

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DE= Defoliant

MO= Molluscicide

WP = Wood Preservative

FM= Fumigant

NE= Nematicide

? = no current pesticidal use

FU= Fungicide

PG= Plant Growth Regulator

Horizon scanning (Actives of concern)	
Neonicotinoids	Three actives are subject to a European ban. Question marks over the future use of neonicotinoids globally.
Pendamethalin	This active qualifies for the monitored list, however due to the fact that testing for this active is cost prohibitive at this stage, we will register as a pesticide of concern.
Glyphosate	European Approval has recently been renewed, albeit for a much shorter period. We will continue to monitor what is likely to happen with this active.

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## 7.0 Additional requirements for Restricted List and Special Attention pesticides

Marks and Spencer recognise that several of the more hazardous pesticides will remain in use within M&S supply chains for some time, as there are currently little or no alternatives. We therefore expect extra effort is made to raise awareness of their hazards and to take short-term actions to reduce the risks they pose and exposure to humans and the environment. In the medium term, Marks & Spencer will collaborate with growers and supply companies to explore ways to reduce their use and phase out over time.

Additional requirements will be put in place for all Restricted List pesticides and for a subset of the Monitored List. Creating a limited set of Special Attention pesticides helps focus efforts on a manageable number of pesticides. Implementing additional requirements for these pesticides will be a joint responsibility of growers, producer associations and supply Companies.

### 7.1 Additional requirements for Restricted List pesticides:

1. Evidence of training of farm workers on hazard awareness and measures to reduce risk and exposure, including not only those directly handling pesticides but also other workers who may be exposed indirectly and neighbouring residents/bystanders
2. Evidence of farm management risk assessment and implementation of protective measures
3. Actions to explore and trial alternatives for medium term phase out, via reportable action plans, with support/collaboration from M&S and pesticide working group

### 7.2 Additional requirements for Special Attention Monitored pesticides:

1. Evidence of training of farm workers on hazard awareness and measures to reduce risk and exposure, including not only those directly handling pesticides but also other workers who may be exposed indirectly and neighbouring residents/bystanders
2. Evidence of farm management risk assessment and implementation of protective measures
3. Efforts to reduce use and explore alternatives for longer term phase out, via reportable action plans, with support/collaboration from M&S and pesticide working group.

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## 8.0 Pesticide Concession Process:

In the event that a pesticide which is on the M&S restricted list is required to be used, then an application requesting it's use must be completed. A Pesticide concession request form must be submitted for approval to the Marks & Spencer Agronomist responsible for the crop. (See Appendix 1 for Pesticide Concession request form Template).

## 9.0 Stakeholder Consultation:

We will engage with our supply base, Industry bodies and PAN UK to help to develop our pesticide policies and strategies. This will take the form of an Agronomy group made up of these key stakeholders. Areas of work will include:-

- Residue reduction initiatives
- Reduction programmes on those pesticides of interest
- New & emerging Technologies and alternatives to pesticides
- Legislative changes and horizon scanning
- Best Practice in the handling, storage and use of Pesticides.
- Educational programmes within the supply base to instruct on human health and environmental protection.
- Engagement with Bio-pesticide producers to explore alternative controls and actively encourage growers to use bio controls where appropriate.
- Explore further use of barrier controls, e.g. nets to reduce the ingress of insects into crops during key crop growth stages.

## Neonicotinoids:

Three key neonicotinoids (Clothianidin, imidacloprid and thiamethoxam) are subject to a European ban (with the exception for crops grown under protection). The European decision does not affect 3<sup>rd</sup> Countries outside Europe using these products, however we would encourage all our growers and suppliers globally, to re-evaluate the use of all these actives, with a view to removing them from their pesticide programmes. As a business we will continue to evaluate their use within the supply base and will work with our growers to seek alternatives.

## Glyphosate:

The debate around Glyphosate looks set to continue following its renewal by the European Commission for a further 5 years back in November 2017. It is difficult to predict what will happen when this approval period expires, so we must be ready for whatever decision is made.

We would therefore encourage our growers and suppliers to look at alternative weed control strategies.

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## 10.0 Pesticide Testing

Testing for pesticide residues is one way for checking that correct applications have been made in accordance with Good Agricultural Practice (GAP). An effective testing programme should be established by Direct Supplier and/or the Primary Producers. Marks & Spencer will also conduct residue testing across our fresh produce lines. The results of which will be reported to the Food Management Team (FMT) and will be included in the Marks & Spencer Governance programme.

## 11.0 Pesticide Residues

M&S have the ambition to only sell fresh produce that does not have any pesticide residues (based on a tolerance of 0.01ppm). All Direct Suppliers are required to share their pesticide testing results with M&S. Our nominated testing laboratory has been employed to collect this data. For more information please see the M&S Approved laboratories for Independent Product Testing.

## 12.0 MRL Exceedence Procedure

The following outlines the action to take in the case of a pesticide residue exceeding the Maximum Residue Level (MRL), or where a non-approved pesticide is identified.

***NB: It is illegal to place a product that contains pesticide residues in excess of the MRL or a product which contains a non-approved pesticide on the market.***

### 12.1 Procedures for Marks & Spencer technologists

1. Make sure the laboratory can confirm the positive result with a second analytical method or by a mass spectrometer on a second sub-sample. If the MRL is exceeded, it needs to meet a recover value in the range 70-110%. Confirm that the laboratory has UKAS accreditation for the specific residue analysis giving the positive result.
2. Discuss with the laboratory the significance of the results compared with their own historic data and Pesticide Residues in Food (PRiF) data.
3. Sub-samples of all raw materials tested are kept frozen at our nominated Laboratory. You can use these for re-testing, either at the M&S nominated laboratory or elsewhere, if there is a dispute. However, you should not do this routinely as it undermines the significance of the original testing carried out.
4. E-mail a copy of the interim report to the supplier. Ask the supplier to carry out a consumer risk assessment. This establishes whether the highest level of residues present could lead to the ARfD or ADI being exceeded by a 'high-level' consumer.
5. Ask the supplier to identify the source (grower and field) of the sample, the size of the lot where the sample came from, and what the lot is used for. Also find out if there is a possibility of further products from the same source being in the production or marketing system, or whether further products could enter the system from the same field or cold store. If raw material from the exact same lot is being used to supply Marks & Spencer,

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then you should remove the affected crop from display where the volumes are small. You should consider further testing if the volume involved is high e.g. frozen products, because there will be greater variability in residue levels within larger batches. Inform prepared suppliers if a product from the same lot is used for further processing. Replace the affected crop with a new supply.

6. If the suppliers current supply is from a different source (grower or field), and if the new field has not received the same treatment as the implicated crop, then you can continue selling the product while we wait for the supplier's residue results. The supplier should pay for all re-testing.

7. If you identify a pesticide issue, the supplier should provide the full pesticide control documentation and usage information relating to the issue or incident, ideally within 4 hours of the initial request and **definitely** within 24 hours.

### 12.2 Procedures for Direct Suppliers:

1. Identify the source of the sample. For example, is the product from the same source (grower and field) still being used to supply Marks & Spencer? Is raw material from the same source being sent to our prepared suppliers for further processing? Take immediate action to isolate any product from the identified source on-site and place a temporary hold on bringing in further product from the same source. Inform your Marks & Spencer technologist of any product in transit to Depot or store providing full details of the grower involved.
2. You should send samples of the isolated stock or samples from the same field or store, for analysis to the supplier's own laboratory and the M&S nominated Laboratory - an urgent response is required. You must review the results of this repeat analysis immediately with Marks & Spencer.
3. If the product supplied to Marks & Spencer is from a different source, then samples from this new lot should also be tested for pesticide residues as outlined above.

### 12.3. Investigation by Marks & Spencer technologists and Direct Suppliers

1. Conduct a traceability exercise to identify the source of the sample.
2. Review the proposed pesticide usage list for the affected crop or grower.
3. Review grower's actual application records relating to the affected consignment. Check that all the pesticides used are approved in the country of origin. Does the harvest interval, frequency or dosage comply with the product label details? Who is responsible for providing advice on the quantity and type of pesticide applied? Check Qualifications.
4. Check the grower's permission to harvest procedures.

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5. Review the suppliers and growers residue testing programme. Review the historic residue data for the affected product. Is any pre-harvest sampling done?
6. Has anything on the farm changed recently e.g. weather, crop covers, new formulations, new equipment, which result in an MRL issue?
7. Review any audits completed by the supplier or the grower who supplied the affected product. If it is a UK source Red Tractor and for overseas sources, Global GAP.
8. The suppliers technical personnel responsible for pesticides must make a full and detailed 'incident report' that summarises the information obtained above. It should identify the cause of the problem and recommend appropriate corrective action. A re-evaluation of the risk category of the particular grower must take place depending on the conclusions.

### 13.0 Global Counterfeiting of Plant Protection Products:

As in most high value industries, the incidence of counterfeiting and the illegal traffic in plant protection products (PPP's) has been growing substantially over recent years and across all regions of the world. Current economic difficulties and high input costs, together with the loss of many exceptionally useful products from the market place, has led to the "provision" of "cheaper" alternatives from "new" sources.

These counterfeits take the form off fake products which can contain anything from water to talcum powder, sophisticated counterfeits of legitimate brands which usually have high quality labelling (and looks like the real thing) and illegal parallel imports which are illegal generic copies of legitimate parallel imports, which have been repackaged and sold as branded products.

All Plant Protection Products used should be legally registered in the country of application. If no registration process exists in the Country of application, then a neighbouring country's registration process can be used.

If a farmer or grower has suspicions about a product, they should immediately contact one of the following; the manufacturing company, the relevant enforcement authority (e.g. plant protection inspectors) or the national trade association and work with them to determine the nature and source of the product. Likewise, if you are aware of illegal PPPs in the market place, please report any information directly to the relevant enforcement authority (e.g. plant protection inspectors) or anonymously through toll-free anti-counterfeit helplines established in most countries.

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## 14.0 Marks & Spencer - : Supporting Pollinator Health & Diversity

Seasonal colony losses of managed honeybees have been high in parts of North West Europe and North America for several years, while wild pollinators have declined in occurrence and diversity at local and regional scales. International experts agree that several aspects of current intensive agricultural practices threaten bees and other insect pollinators and the pollination services they provide. These include: habitat fragmentation and destruction, leading to loss of food and nesting resources; spread of bee parasites and diseases; and acute and chronic harm from exposure to some insecticides. Use of herbicides can indirectly affect pollinators by reducing abundance and diversity of flowering plants.

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) recommends moving towards more sustainable agriculture and reversing the simplification of farming landscapes to reduce pollinator declines, as well as actions to reduce pesticide use and promote IPM.

It is important for farmers and growers who supply Marks & Spencer to take bee health seriously. We actively encourage our growers to improve their understanding on the plight of all insect pollinators and do all they can to stabilize and improve populations on their farms. Farmers and growers can make an important contribution to foraging, nesting and hibernation sites for individual wild bees and colonies.

The objective is to offer a diverse range of habitats and flowering sources and by following Good Agricultural practice. There are a number of initiatives already in place which seek to improve bee habitat and populations.

The links below provide guidance on how this can be achieved:-

<https://www.ceh.ac.uk/news-and-media/news/new-practical-guide-habitat-creation-and-management-pollinators>

<http://www.insectpollinatorsinitiative.net>

<https://www.buglife.org.uk/helping-pollinators-at-a-landscape-scale>

<https://bumblebeeconservation.org/get-involved/managing-your-land>

<https://beeconnected.org.uk/>

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## 15.0 Pesticide Glossary:

AEA Agricultural Engineers Association

ADI Acceptable Daily Intake – This is the amount of a chemical which can be consumed every day for a lifetime in the practical certainty that no harm will result.

ARfD Acute Reference Dose – The definition of the ARfD is similar to that of the ADI, but it relates to the amount of a chemical that can be taken in at one meal or on one day without appreciable health risk to the consumer.

BASIS British Agrochemical Standards Inspection Scheme

DEFRA Department for Environment, Food and Rural Affairs

EU European Union

Global GAP Euro-Retailer Good Agricultural Practice Protocol

FAPAS Food Analysis Performance Assessment Scheme

FPC Fresh Produce Consortium

GLP Good Laboratory Practice

AHDB Agriculture and Horticulture Development Board  
(HDC Horticultural Development Council)

HSE Health and Safety Executive

ICM Integrated Crop Management

IPM Integrated Pest Management

LEAF Linking Environment and Farming

LOD Limit of Determination

MRL Maximum Residue Level

NPTC National Proficiency Tests Council

NRoSO National Register of Sprayer Operators

NSTS National Sprayer Testing Scheme

PAN Pesticide Action Network

PRiF Pesticide Residues in Food

CRD Chemicals Regulation Directorate

EAMU Extension of Authorisation for Minor Use

UKAS United Kingdom Accreditation Service

WiGRAMP Working Group on the Risk Assessment of Pesticides:

<http://cot.food.gov.uk/committee/committee-on-toxicity/cotwg/wigramp>

Department for Environment, Food and Rural Affairs:

<https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs>

DEFRA The Code of Practice for using Plant Protection Products (PB11090)

Copies of the Code can be downloaded from [www.pesticides.gov.uk](http://www.pesticides.gov.uk). Hard copies are available from DEFRA Publications.

Protecting our Water, Soil and Air published by TSO

All are available to download free from [www.redtractor.org.uk](http://www.redtractor.org.uk) or from DEFRA Publications

“Is your sprayer fit for work?” DEFRA PB3160

“Keeping Pesticides out of water” DEFRA PB2088

“Pesticides and Integrated Farm Management – a guide to responsible use” DEFRA PB9241

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Opportunities for saving money by reducing waste on your farm – A manual for farmers and growers

Pesticides, Reference Book 500 (published annually)

The Prevention of Pollution of Controlled Waters by Pesticides – The Environment Agency Health and Safety Executive (HSE)

HSE Guidance Note AS 16 Guidance on Storing Pesticides for Farmers and other Professional Users

HSE Guidance Note MS 17 Biological Monitoring of Workers Exposed to Organophosphorus Pesticides

Food Standards Agency: <http://www.food.gov.uk/>

British Crop Protection Council (BCPC) <http://www.bcpc.org/>

The UK Pesticide Guide (Published annually) (The “Green Book”)

The Pesticide Manual – A World Compendium

The Biopesticide Manual – A World Compendium

Campden & Chorleywood Food Research Association [www.campden.co.uk](http://www.campden.co.uk)

“Pesticide Controls in the Food Chain” CCFRA Guideline No. 19

Crop Protection Association (CPA): <http://www.cropprotection.org.uk/>

“Minimising Food Residues” publication

Why is the avoidance of pesticide residues so important? publication

What can you do in the field to minimise residues? publication

Pesticide Disposal publication

Guidelines for the safe and effective use of crop protection products <http://www.gcpf.org/https://croplife.org/wp-content/uploads/2014/04/Guidelines-for-the-safe-and-effective-use-of-crop-protection-products.pdf>

Guidelines for personal protection when using pesticides in hot climates

<https://croplife.org/wp-content/uploads/2014/04/Guidelines-for-personal-protection-when-using-crop-protection-products-in-hot-climates.pdf>

Chemicals Regulation Directorate:

<http://www.pesticides.gov.uk/guidance/industries/pesticides/topics/About-The-Chemicals-Regulation-Directorate/General/Responsibility+for+Pesticides.htm>

HSE – Health & Safety Executive maintains an online database with the latest UK/EU

<http://www.pesticides.gov.uk/guidance/industries/pesticides/topics/pesticide-approvals>

PRiF – Pesticide Residues in Food:

<http://www.pesticides.gov.uk/guidance/industries/pesticides/advisory-groups/PRiF>

Your guide to approved pesticides (The “Blue Book”)

<http://www.pesticides.gov.uk/guidance/industries/pesticides/topics/publications/guide-to-pesticides/introduction-to-the-pesticides-guide-blue-book>

Fresh Produce Consortium (FPC) <http://www.freshproduce.org.uk/>

Code of Practice for the Control of Pesticides

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Due Diligence Guidance on the Agricultural Use of Pesticides –  
 Chilled Food Association (CFA) <http://www.chilledfood.org/>  
 LIAISON UK pesticide database: <https://secure.fera.defra.gov.uk/liaison/>  
 Agricultural Engineers Association (AEA) <http://www.aea.uk.com/>  
 Plant Health: <https://www.gov.uk/plant-health-controls>

FERA <http://fera.co.uk/>  
 Red Tractor Assurance: <http://www.redtractor.org.uk/>  
 Global GAP: [http://www.globalgap.org/uk\\_en/](http://www.globalgap.org/uk_en/)  
 Linking the Environment and Farming (LEAF): <http://www.leafuk.org/leaf/home.eb>  
 “The LEAF Handbook for Integrated Farm Management”. A practical guide for the adoption of IFM  
 Non Governmental Organisations (NGO’s)

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## 16.0 Appendices

### 16.1 Pesticide Concession Template Form

<b>Pesticide Concession Form</b>			
This form must be filled in and submitted by the Supplier every time a grower needs a concession to use a restricted pesticide.			
<b>Date:</b>		<b>Supply season:</b>	
<b>Supplier:</b>		<b>Supplier Technologist:</b>	
<b>Growers Name:</b>			
<b>Crop:</b>			
<b>Country of Use:</b>			
<b>Problem Pest/ Disease:</b>			
<b>Commercial Name:</b>			
<b>Active Ingredient:</b>			
<b>Reasoning for use of restricted Chemical:</b>			
<b>What alternatives are available. (include all alternatives even if cost prohibitive or partially effective)</b>			
<b>Proposed Frequency and Quantity of use:</b>			
<b>Actions taken in previous years for control:</b>			
<b>M&amp;S Agronomist Sign Off:</b>	<b>Approved / Not Approved</b>	<b>(please delete as appropriate)</b>	
<b>Name:</b>			
<b>Signature:</b>			
<b>Date:</b>			

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