



**Australian Government**

**Australian Quarantine and Inspection Service**

**GUIDELINES FOR THE APPROVAL OF  
CHEMICAL COMPOUNDS USED AT  
ESTABLISHMENTS REGISTERED  
TO PREPARE GOODS PRESCRIBED  
FOR THE PURPOSE OF THE  
EXPORT MEAT ORDERS**

**Technical Services Branch**  
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**GUIDELINES FOR THE APPROVAL OF CHEMICAL COMPOUNDS USED AT ESTABLISHMENTS REGISTERED TO PREPARE GOODS PRESCRIBED FOR THE PURPOSES OF THE EXPORT MEAT ORDERS**

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## 1. Overview

The Australian Quarantine and Inspection Service (AQIS) must approve all chemical compounds that are used in all areas of a registered establishment where their use may result in the chemical compound coming in contact with products, either directly or indirectly.

Chemical companies, their agents or distributors apply for AQIS approval of their chemical compounds under an arrangement whereby they, together with the occupiers of registered establishments, assume responsibility for the safe use of chemical compounds. All chemical compounds must be used in accordance with the label or instructions contained in product bulletins.

AQIS does not formally evaluate chemical compound formulations but each chemical compound application for approval must be accompanied by a qualified chemist's report certifying that the formulation is correct and safe for use within specified areas of a registered establishment.

Acceptable chemical compounds will be approved by an AQIS 'Instrument of Approval' normally valid for a period of five years, following which the chemical company will be required to make a new application for approval. Provisions have been made to allow for approvals to be valid for less than five years. The revised 'Instrument of Approval' now states the date an approval for a compound lapses.

To ensure approvals do not expire companies should submit re-applications to AQIS up to eight weeks prior to approval lapsing.

AQIS approval of chemical compounds for use within registered export establishments must not be construed as an indication that AQIS has tested the efficacy of the compound, nor must it be construed as an endorsement of the product. In addition AQIS disclaims any responsibility should an approved chemical compound prove to be inefficient, unsatisfactory or be subject to rejection by an overseas government authority.

The AQIS charge for processing each chemical compound application including the issuing of an 'Instrument of Approval', is \$200 providing all necessary information is provided. Should AQIS have to take follow up action on applications, a further charge of \$50 for each occasion that AQIS has to seek information applies.

It is the responsibility of each establishment management to obtain from its supplier, a copy of the 'Instrument of Approval' for any chemicals in use at the establishment which require approval.

For those companies with access to the Internet these guidelines are available at the following address:

<http://www.aqis.gov.au/meat>

The 'List of Chemical Compounds Accepted for use at Establishments Registered to Prepare Goods Prescribed for the Purposes of the Export Meat Orders' is also available at this location.

All chemical compounds approved may be subject to AQIS audit procedures during establishment reviews. At various times field samples of chemical compounds may be taken by AQIS for independent analysis to determine whether the chemical compound continues to comply with the information provided in its approved application.

Operators of registered establishments must on request from an Authorised officer provide that officer with a list of chemical compounds on the establishment, together with :

- a) details of their use or intended use
- b) details of their place and manner of storage
- c) copy of the 'Instrument of Approval'.

Operators of registered establishments must; (a) use chemical compounds that are approved by AQIS (b) store chemical compounds in a room set aside specifically for the purpose, and (c) use chemical compounds in accordance with directions for use and any conditions specified in the AQIS approval.

This document sets out AQIS procedures relating to approved chemical compounds. Further detailed information is contained in SECTION 18.02 'APPROVAL OF CHEMICAL COMPOUNDS USED AT REGISTERED ESTABLISHMENTS' of the Export Control (Meat and Meat Products) Orders 2005 made under the Commonwealth *Export Control Act 1982 (as amended)*.

AQIS approvals do not permit direct application of approved compounds to prescribed goods and or food stuffs, such as fruit and vegetables.

For example - the dipping of fruit in to a sanitiser solution.

Legislation provides for action that may be taken against chemical companies, agents or distributors who:

- supply chemical compounds to registered establishments without gaining AQIS approval
- provide false certified information
- substitute an AQIS approved chemical compound with another product that has not been approved
- refuse to supply a copy of the Instrument of Approval to occupiers of registered export establishments
- fail to provide a sample of their chemical compound formulation to AQIS when required
- continue to supply a chemical compound for use in a registered establishment after the approval has expired.

Legislation may be found at <http://www.aqis.gov.au/law>

General information and copies of these guidelines are available from Technical Services Branch, Canberra phone (02) 6271 6650, facsimile (02) 6272 4112, or through any of the AQIS Regional Offices.

## **2. Chemical compounds that require AQIS approval**

Chemical compounds that fall into the category of requiring AQIS approval include all of the following:

- a) chemical compounds for use in areas where edible food products are prepared, handled or stored (chemical compounds used as an ingredient for edible products are not included in this requirement);
- b) cleaning compounds;
- c) sanitising compounds;
- d) compounds provided for personnel care;
- e) pesticides;
- f) cooling and retort water treatments;
- g) boiler treatments;
- h) compounds for steam lines (where steam contacts edible products directly or indirectly) or primary water cooling loops;
- i) pig scald treatments;
- j) tripe processing chemicals;
- k) lubricants for use in areas where incidental or no contact with edible product may occur,
- l) branding inks; and
- m) odour neutralising agents.

### **3. Chemical compounds that do not require AQIS approval**

- a) Chemical compounds used solely as ingredients in prescribed goods.
- b) Chemical compounds for use solely as denaturants.
- c) Chemical compounds for use solely in laboratories for analytical and similar use
- d) Chemical compounds for use solely in offices or areas in a registered establishment where prescribed goods are not prepared
- e) Chemical compounds for use solely in cafeterias or other retail food service areas.
- f) Chemical compounds for use solely in space heating systems or cooling towers.
- g) Chemical compounds for use solely in treating materials such as skins and hides.
- h) Chemical compounds (except insecticides) for use solely in holding pens, stock trucks and the like.
- i) Chemical compounds for use solely in sewage or waste water systems outside buildings.
- j) Chemical compounds for use solely in secondary cooling loops.
- k) Chemical compounds (except insecticides) for use solely on the exterior of buildings or areas immediately adjacent to the exterior of buildings.
- l) Chemical compounds for use solely for cleaning or maintenance of vehicle exteriors.
- m) Chemical compounds for use solely in workshops for -
  - cleaning machinery;
  - removing grease and oil; or
  - lubricating equipment for use in inedible product areas.
- n) Marking inks used for the application of information to packaging materials used as coverings of prescribed goods
- o) Soda ash or similar chemical compounds held as a contingency specifically for use in the disinfecting of premises in the event of an outbreak of an exotic disease

Note: it is the responsibility of the management of a registered establishment to ensure that chemical compounds stored or used on the establishment are either approved or in a category for which no AQIS approval is required.

#### **4. Specific chemicals having general acceptance**

A number of chemicals in common use are marketed as pure chemicals using the generic name rather than a trade name.

In such cases, no formal instrument of approval is required, as general approval exists regardless of manufacturer. Chemicals falling into this category are:

- Acetic acid
- Calcium carbonate
- Calcium hydroxide
- Calcium hypochlorite
- Citric acid
- Hydrochloric acid
- Hydrogen peroxide
- Lactic acid
- Phosphoric acid
- Potassium hypochlorite
- Sodium bicarbonate
- Sodium carbonate (soda ash)
- Sodium hydroxide (caustic soda)
- Sodium hypochlorite
- Sodium metasilicate
- Sodium tripolyphosphate
- Sulfuric acid
- Tetrasodium pyrophosphate
- Trisodium phosphate

#### **5. Edible oils**

Edible oils listed below meeting the standards laid down by the Australian Food Standards Code may be used for lubrication purposes without restriction.

- Arachis oil (Peanut oil)
- Cottonseed oil
- Maize or Corn oil
- Olive oil
- Rapeseed oil
- Safflower oil
- Soyabean oil
- Sunflower oil

## **6. Chemical compounds that are not acceptable**

AQIS approvals do not permit direct application of approved compounds to prescribed goods and or food stuffs, such as fruit and vegetables.

For example - the dipping of fruit in to a sanitiser solution.

### **Hazardous substances**

Preparations containing antimony, arsenic, cadmium, lead, mercury, selenium, or other materials such as carcinogens, mutagens, and teratogens classified as hazardous substances may not be used for any purpose anywhere within a plant. Specific exceptions, such as the use of lead in solders or other alloys used in the fabrication and/or maintenance of plant facilities, may be granted where it can be demonstrated that there is no hazard created to edible product. The 'Lake' variety of erythrosine is rated by the USDA as a potential carcinogen and as such can not be included in formulations for AQIS approval.

### **Potentially harmful compounds**

Potentially harmful compounds such as chromic acid, formaldehyde, hydrofluoric acid, hydrofluosilicic acid, oxalic acid, or the salts of those compounds are not generally permitted for use.

Special consideration may be given to granting an approval if a need can be demonstrated and the use can be controlled so that there is no human hazard and no opportunity for food products to become contaminated.

### **Odorous compounds**

- a) Preparations containing heavy perfumes, isomers of dichlorobenzene, pine oil etc, are not permitted in areas where edible products are handled
- b) Hand care preparations which leave a residual fragrance on the hands after rinsing are not permitted for use in food handling areas.

## **7. Applying for Chemical Compound Approval**

Chemical manufacturers, agents or distributors of chemical compounds intended for use on registered establishments are required to submit an approval.

### **Application Format**

Pages 15 and 16 of this booklet show the correct application format. It is not acceptable to alter or omit sections of the chemist or applicant's declarations. Both declarations must be signed.

Bulk applications with numerous formulations covered by a single chemist's and applicant declaration are not acceptable. This method is not permitted under the legislation as confusion can arise regarding usage category and areas for use in the establishment, or problems with one formulation may delay approval of the other compounds. A separate application must be made for each compound.

Multiple categories of use for one compound are now permitted where chemical formulations allow. One application (single fee) can cover one or more categories providing all requirements of the USDA Guidelines and the Australia New Zealand Food Standards Code are met. In addition where multiple categories are used, separate directions for use for each category are required to be present on the label and/or Material Safety Data Sheets.

### **Categories of Use**

The defined Approved Usage Categories for chemical compounds are listed in the next two parts of this document. Chemical compounds for which no usage category appears obvious should be submitted for approval as a Miscellaneous Compound.

### **Formula of Product**

Details of the formulation of the chemical compound must include, the chemical name, Chemical Abstracts Service (CAS) registry number and percentage content.

In order to protect confidential formulations, ingredient details may be provided in the form of small ranges providing the ranges are within any boundaries set by the appropriate regulations. For example the ingredient content range for a General Cleaner Type A must not provide the possibility of the formulation being in excess of 20 percent causticity. The content of Sodium Hydroxide could be listed as 10-15% but not 10-25%.

Applicant should be aware that when AQIS is required to seek further information on applications, a further charge of \$50 for each occasion applies.

Chemical Abstracts Service (CAS) registry numbers can be established by reference to documents such as the 'Australian Inventory of Chemical Substances' available through the Australian Government Printing Service, catalogue no. - 91 122031, or on microfiche through Worksafe Australia, contact (02) 9565 9467.

The trade names and manufacturer should be included wherever applicable. All colourings and perfumes must be included.

Dyes must be identified by their colour index (CI) number and must conform to Australian Food Standards for food additives where there is possible direct or indirect contact with edible product.

Perfumes must be identified by proprietary name and manufacturer. Perfumes are unacceptable in compounds intended for use in edible product areas or where the perfume could be used to mask odours caused by unsatisfactory hygiene or sanitation.

Colourless or odourless compounds require no statement to this effect in the formula table.

All information provided will be treated by AQIS as 'Commercial in confidence'.

### **Categories of Use/Restrictions on use**

The appropriate category of use and restrictions on use statements (refer to pages 17, 18 and 19 of the AQIS guide-line booklet) must appear on the application where required and must be consistent with the usage category being sought for the compound. For example as shown on page 17 of the booklet, a 'General Cleaner Type C' is only for use in areas of establishments in which there are no prescribed goods.

### **Qualified Chemist**

It must be certified by a qualified chemist that the formulation in the application is true and correct and that the compound as proposed for use in registered establishments will not deleteriously affect:

- food or food products

**Note:** a qualified chemist is a person who is a member of the Royal Australian Chemical Institute or possesses qualifications sufficient to meet the requirements for membership of the Institute. This refers to Fellows, Members and Associate Members of the Institute.

In addition, the qualified chemist must certify that the chemical formulation complies with any relevant requirements of the Australian Food Standards Code and is suitable for use in accordance with the requirements of the USDA 'Guidelines for Obtaining Authorisation of Compounds to be Used in Meat and Poultry Plants' (see Part 10 of this document).

### **Chemist's declaration**

In some instances chemists have signed that a formulation complies with relevant standards or USDA requirements yet on examination the compound contains compounds not permitted (for example hydrofluoric acid).

It is incumbent on the signing chemist to understand the requirements for the chemical compound formulation being submitted for approval. Page 9 of the AQIS booklet lists compounds not acceptable, and pages 27 onwards list compounds and concentrations accepted by the USDA.

## Declaration of applicant

All of the above details must be countersigned by the managing director or person responsible for the operation of the chemical company, agent or distributor stating that 'the chemical compound will be manufactured, labelled and contain directions for use in accordance with the details supplied in the application'.

The applicant should state their position within the company (eg Manager etc.) when signing the application.

## Application check-list

The application check-list shown on page 16 of the booklet is not part of the application format and does not have to be forwarded completed with the application.

## Additional Information

The chemical company, agent or distributor making the application must also provide the following details which are to be initialled by the qualified chemist:

- where the chemical compound ingredients are identified by a trade name or initials alone, a data sheet giving full details of the particular ingredient, in particular toxicity, biodegradability and waste disposal
- one copy of the proposed label and **complete directions for use**
  - .. including dilution rates
  - .. it is important that the directions for use must be consistent with the usage category being sought for the compound in the approval application. For example a General Cleaner Type B can only be used in soak tanks or applied by mechanical cleaning devices. Manual cleaning directions would therefore be inappropriate
- Additionally, please include a copy of a publicly available MSDS.
  - .. a common problem is not to include a rinse statement for cleaning compounds used in edible product areas. Pages 21 and 29 of the booklet states that the wording 'rinse product contacting surfaces with potable water after use' must be used except for specific no rinse sanitisers
  - .. for compounds that require mixing or dilution, ratios may not always be easily understood by the end user. It is preferred that directions of use are stated in plain English, easily understood and any ratios also expressed on a mls per litre basis
- a copy of the approval where the compound has been previously approved by a major regulatory authority (eg USDA, NZMAF).

Where the manufacturer and agent or distributor are not the same, the agent or distributor must submit the following items in addition to any information that may be required from the manufacturer

- a) a letter from the agent or distributor relating the compound to that of the manufacturer, and
- b) a label for the compound as distributed.

### **Application to alter the Company Name or address, chemical formulation or details on labels of AQIS approved chemicals.**

Companies wishing to alter the company name or address, chemical formulation or label details of an AQIS approved chemical compound are required to submit a new application. This new application will incur a fee of \$200.00 and a cheque to the "Collector of Public Monies, AQIS" for this amount should be forwarded with the application.

### **AQIS approval**

Several companies have requested to acknowledge on the product that it is has been approved by AQIS for use on registered establishments. The instrument of approval however, specifically states 'the person to whom this approval is granted **shall not** use the approval in any form of advertising or on any label unless the wording or display has been approved, in writing, by the Secretary'. To date, no such wording has been approved.

### **Fee**

A cheque to the 'Collector of Public Moneys, AQIS' of \$200.00 for each chemical compound submitted for approval should be forwarded with the application.

### **Post To**

Chemical Compound Approval Application  
Technical Services Branch,  
Australian Quarantine and Inspection Service  
GPO Box 858  
Canberra ACT 2601

Any departure from the above details may necessitate a new submission together with a further fee. AQIS will retain the right at any time to request a sample be submitted if necessary before any approval is granted

An example of the 'Instrument of Approval' returned to the company is shown in part 9 of this document.

## FORMAT OF

### APPLICATION FOR APPROVAL OF A CHEMICAL COMPOUND FOR USE IN REGISTERED ESTABLISHMENTS

On behalf of the company specified below, I apply for approval of the following chemical compound for use in registered establishments for the purposes stated in this application.

Company name

Company address

Name of Compound

Category of use \*

*\*Note: Insert the appropriate category from those listed at Schedule 15  
(Section 8 of this document)*

### FORMULA OF PRODUCT

Chemical Name	Colour and CI No.	Perfume	Trade Name	Chemical Abstracts Service Registry No.	Percentage	
					A	B
						(Range)
					MIN	MAX
Total					100	

*Note : Except for chemical compounds where a range is specified, the total must be 100%.*

#### Declaration of qualified chemist

- [1] The formulation of the chemical compound described above is true and correct.
- [2] If used in accordance with the directions on its label, the chemical compound,
  - a) will not deleteriously affect food or food products;
- [3] The formulation of the chemical compound complies with -
  - a) any relevant standards set out in the Food Standards Code of the Australia New Zealand Food Authority; and
  - b) the requirements of the United States Department of Agriculture's Food Safety and Inspection Service Agriculture Handbook titled 'Guidelines for Obtaining Authorisation of Compounds to be used in Meat and Poultry Plants'.
- [4] The chemical compound is suitable for use in \* .....

*\*NOTE: The information on suitability for use may be omitted if it is inapplicable.*

Printed name of qualified chemist  
Qualifications of qualified chemist  
Signature of qualified chemist  
Date

**Declaration by the applicant#**

The chemical compound will be manufactured, labelled and contain directions for use in accordance with the details supplied in this application.

Printed name of signatory of application  
Signature of signatory of application  
Position of signatory of application  
Date

*#NOTE: To be completed by the Managing Director or similar officer if the applicant is a corporation.*

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**APPROVAL APPLICATION CHECK-LIST**

Has your application for approval

- Followed the correct format,
- Been signed by both the applicant and a qualified chemist.
- Have you included a copy of the product label
- Have you included a cheque for the application fee.
- Has all other relevant material, eg MSDS been included,
- Do not include a sample of the compound with the application.
- Post to:

Chemical Compound Approval Application  
Technical Services Branch  
Australian Quarantine and Inspection Service  
GPO Box 858  
Canberra ACT 2601

## 8. Approved Usage Categories

The approval usage categories are listed below together with the restriction applicable to each category.

Item	Category of Use	Description and Restrictions on Use
1.	General Cleaner Type A	General cleaning compound for use in all areas.
2.	General Cleaner Type B	Cleaning compound for use in all areas which, due to its chemical content, may only be used in soak tanks or applied by mechanical cleaning devices.
3.	General Cleaner Type C	General cleaning compound for use in areas of establishments in which there are no prescribed goods.
4.	Acid Cleaner	Acid cleaning compound for periodic use in all areas.
5.	General Scouring Cleaning	A scouring compound suitable for use in all areas.
6.	Sanitiser	General sanitising compound without detergent properties for use in all areas.
7.	Sanitiser/Detergent	General sanitising compound with detergent properties for use in all areas.
8.	Liquid Hand Soap Type A	Liquid soap for hand washing to be used from fixed dispensers sufficiently remote from prescribed goods so as not to create a hazard, for use in all areas.
9.	Liquid Hand Soap Type B	Liquid soap or cream for hand washing or hand sanitising to be used only from fixed dispensers in amenities, suspect pens or areas not containing edible prescribed goods.
10.	Lubricant Type A	A lubricant involving incidental contact with prescribed goods to be used with the minimum application necessary to accomplish the desired technical effect.

- |     |                           |  |
|-----|---------------------------|--|
| 11. | Lubricant type B          | A compound for use as an application to meat hooks and equipment to clean them and to prevent rust, provided those portions of the hooks and equipment that contact edible prescribed goods are clean and free of the compound before the hooks or equipment are used again. |
| 12. | Lubricant Type C          | A lubricant involving no contact with prescribed goods to be used with the minimum application necessary to accomplish the desired technical effect  |
| 13. | Pesticide Type A          | A non-residual insecticide for use in areas that may contain prescribed goods, provided any exposed prescribed goods are removed or covered before spraying is begun and the area is cleaned by thorough washing after spraying is completed.                                |
| 14. | Pesticide Type B          | A residual insecticide for use only in areas that do not contain prescribed goods, or associated packaging material.   |
| 15. | Pesticide Type C          | A rodenticide for use strictly in accordance with labelled directions.   |
| 16. | Pesticide Type D          | A miscellaneous pesticide for use strictly in accordance with labelled directions.   |
| 17. | Tripe Treatment Compound  | A tripe treatment agent for use in accordance with labelled directions.  |
| 18. | Pig Scald Treatment Agent | A compound for treating pig scald water to be thoroughly rinsed from treated pigs before evisceration.   |
| 19. | Boiler Treatment          | A compound for minimising scale build up in compound systems delivering potable water, where direct or indirect contact with prescribed goods may be involved, to be used in accordance with labelled directions.  |

20.	Retort Water Treatment Agent	A compound for cooling and retort water treatment to be used in accordance with labelled directions.
21.	Marking Ink	Ink for marking carcasses.
22.	Odour Neutralising Agent	A compound for use in areas containing inedible prescribed goods, non-processing areas or exterior areas for use in odour control, provided it is not used to mask odours resulting from unsanitary conditions and any characteristic odour does not penetrate into areas containing edible prescribed goods.
23.	Water Treatment Compound (Requirement for AQIS approval for chemical compounds in this category deleted on 14 June 2000)	AQIS no longer approves chemical compounds in this category. Chemicals used for treatment of potable water at export registered meat establishments must meet the requirements of the <i>Export Meat Orders</i> and the Australian Drinking Water Guidelines 1996. They must not cause direct or indirect contamination of prescribed goods or in any way or create a hazard to the preparation of prescribed goods.
24.	Metal Cleaner and Polish	A metal cleaner for use on non-food contact surfaces.
25.	Drain Cleaner	A compound for chemical treatment of blocked drains.
26.	Miscellaneous Compound	A compound to be used in accordance with the manufacturer's directions.

## 8a. Notes on Usage Categories

The following is a list of requirements that are commonly not adhered to in applications. This is not an exhaustive list of the requirements of these guidelines.

### 1. General Cleaner Type A

- must include an instruction to 'rinse product contacting surfaces with potable water after use' or words to that effect.
- companies seeking approval for enzyme based compounds must provide evidence to substantiate that the compounds do not contain any viable pathogenic organisms which may effect product safety.
- 'Spray and Wipe' type cleaners can be approved in this category only when the directions for use include an instruction to 'rinse product contacting surfaces with potable water after use' or words to that effect. Otherwise see category 26.

### 2. General Cleaner Type B

- includes strongly alkaline compounds (>20% caustic soda or similar).
- must include labelled instructions to 'rinse product contacting surfaces with potable water after use' or words to that effect.

### 6. Sanitiser

- must include labelled instructions to 'rinse product contacting surfaces with potable water after use' or words to that effect except in the case of sanitisers that meet the necessary USDA Guidelines (USDA Section 5.4 (A)(3)) for non-rinse sanitisers.
- where sanitisers are formulated to meet USDA Guidelines (USDA Section 5.4 (A)(3)) the following restrictions apply:
  - the application must state category of use '*Sanitiser (no rinse)*',
  - the labelled directions must reflect the requirement that 'direct contact with prescribed goods must be prevented and treated surfaces adequately drained before processing operations resume'.
  - compounds will not be approved where the intended usage is for direct application to prescribed goods and or food stuffs, such as fruit and vegetables.

### 7. Sanitiser/Detergent

- must include labelled instructions to 'rinse product contacting surfaces with potable water after use' or words to that effect.
- compounds will not be approved where the intended usage is for direct application to prescribed goods and or food stuffs, such as fruit and vegetables.

## 8. Liquid Hand Soap Type A

- includes handwashing compounds for use in all areas and
- includes combination handwashing/sanitising compounds
- must include labelled instructions to ‘rinse hands with running water after use’ or similar.

## 10. Lubricant Type A

- incorporates compounds that may result in incidental contact with prescribed goods
- must include directions for use

## 11. Lubricant Type B

- these products are chemically acceptable for application to hooks, trolleys and similar equipment to clean and prevent rust. Those portions of the equipment that contact edible products must be made clean and free of the mixture before reuse.
- must include directions for use.

## 13, 14, 15, 16 Pesticides

- AQIS is prepared to consider insecticides other than those listed in Section 5.6 of the USDA guidelines provided the appropriate Material Safety Data Sheets and any other relevant information on the constituents is included with the application.
- relevant information should include the appropriate National Registration Authority (NRA) approval for food processing areas where appropriate.

## 21. Marking Ink

- inks used for marking edible product
  - formal approval is required for those marking inks (including food grade crayon markers/pencils) used to mark edible prescribed goods (meat or meat products).
- inks used for marking inedible product
  - AQIS **does not formally approve inks** used to mark condemned materials, but rather allows manufacturers wishing to supply these compounds to registered establishments, to do so on the understanding the compounds comply with the following basic requirements:
    - .. the ink compound must not contain any hazardous toxic substance or strong odours.
    - .. the colour of the ink must be distinctive and must contrast with the ink colour used in stamping and identifying edible product.
    - .. application of the ink compound shall be such that no direct or indirect contact is made with prescribed goods.

- .. storage of these ink compounds shall be in accordance with any given direction(s) by an Authorised Officer.
  - .. the compound must not be capable of being washed off without trace once applied to condemned material.
  - .. if used in accordance with the manufacturers directions on its label the compound will not deleteriously effect the health and or well being of people involved with its use.
- inks used on packaging materials
    - marking inks used solely on packaging materials (eg. inks used on stamp pads and stencilling of stockinet bags) do not require AQIS formal approval.
    - AQIS raises no objection to the use of these marking inks provided the following conditions are met:
      - .. their use is confined to packaging preparation such that there is no direct or indirect contamination of prescribed goods.
      - .. their use shall be subject to the satisfaction and control of Area Technical Manager of the Area.

#### 25. Drain Cleaner

- companies seeking approval for enzyme based compounds must provide evidence to substantiate that the compounds do not contain any viable organisms which may effect product safety.

#### 26. Miscellaneous Compound

- includes ‘Spray and Wipe’ type cleaners without potable water rinse statements. Not allowed to be used in edible product areas.
- includes Laundry compounds used and stored on a registered establishment.
- includes Barrier creams for hands, however usage is restricted to application at the end of the days work or prior to leaving the establishment.

#### Additional Notes

- paints and surface coatings are not approved under this system. These compounds are approved through AQIS regional offices as part of the existing construction and equipment guide-lines for export meat establishments.

## 9. Sample application and instrument of approval

### APPLICATION FOR APPROVAL OF A CHEMICAL COMPOUND FOR USE IN REGISTERED ESTABLISHMENTS

On behalf of the company specified below, I apply for approval of the following chemical compound for use in registered establishments for the purposes stated in this application.

Company name **Cleano Cleaners Pty Ltd**  
Company address **10 Smith St, Blackall, NT**  
Name of Compound **Washo**  
Category of use **General Cleaner Type A**

#### FORMULA OF PRODUCT

Chemical Name	Colour and CI No.	Perfume	Trade Name	Chemical Abstracts Service Registry No.	Percentage		
					A	B	
						(Range)	
MIN	MAX						
Water		nil			80	90	
Sodium hydroxide			Hydroxo	1310-73-2	10	15	
Total					100	90 115	

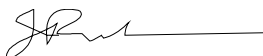
*Note : Except for chemical compounds where a range is specified, the total must be 100%.*

#### Declaration of qualified chemist

- [1] The formulation of the chemical compound described above is true and correct.
- [2] If used in accordance with the directions on its label, the chemical compound,
  - a) will not deleteriously affect food or food products;
- [3] The formulation of the chemical compound complies with -
  - a) any relevant standards set out in the Food Standards Code of the Australia New Zealand Food Authority; and
  - b) the requirements of the United States Department of Agriculture's Food Safety and Inspection Service Agriculture Handbook titled 'Guidelines for Obtaining Authorisation of Compounds to be used in Meat and Poultry Plants'.

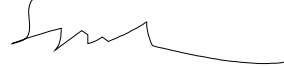
[4] The chemical compound is suitable for use in \*..Any food processing area....

*\*NOTE: The information on suitability for use may be omitted if it is inapplicable.*

Printed name of qualified chemist                    **John Right**  
Qualifications of qualified chemist                **Bsc**  
Signature of qualified chemist                        
Date    **11 May 1992**

**Declaration by the applicant#**

The chemical compound will be manufactured, labelled and contain directions for use in accordance with the details supplied in this application.

Printed name of signatory of application        **Roger Smith**  
Signature of signatory of application              
Position of signatory of application              **General Manager**  
Date    **21 May 1992**

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**APPROVAL APPLICATION CHECK-LIST**

Has your application for approval

- Followed the correct format,
- Been signed by both the applicant and a qualified chemist.
- Have you included a copy of the product label
- Have you included a cheque for the application fee.
- Has all other relevant material, eg MSDS been included,
- Do not include a sample of the compound with the application.
- Post to

Chemical Compound Approval Application  
Technical Services Branch  
Australian Quarantine and Inspection Service  
GPO Box 858  
Canberra ACT 2601

**IOA No 0001**

**APPROVAL OF CHEMICAL COMPOUND**

COMMONWEALTH OF AUSTRALIA  
EXPORT CONTROL ACT 1982  
EXPORT CONTROL (MEAT AND MEAT PRODUCTS) ORDERS 2005

**INSTRUMENT OF APPROVAL FOR CHEMICAL COMPOUND**

I, **Peter Francis McKay**, delegate of the Secretary, pursuant to order 128 of the Prescribed Goods (General) Orders hereby approve for use in registered establishments the chemical compound known as **Washo** which is manufactured by **Cleano Pty Ltd** subject to the conditions specified in the following Schedule.

**SCHEDULE**

1. The chemical compound is approved under the category **8** for use as **Liquid Hand Soap Type A**.
2. The chemical compound shall be manufactured, labelled and contain directions for use in accordance with the details supplied by the applicant in the application for approval dated **11 May 1997**.
3. The person to whom this approval is granted shall notify the Secretary of any proposed alteration of formulation, labelling or directions for use of the chemical compound, and shall not effect any such alterations without receiving notification of approval from the Secretary.
4. This approval is not to be construed as an indication that the Secretary has tested the efficacy of the chemical compound nor as an endorsement of the chemical compound.
5. The person to whom this approval is granted shall not use the approval in any form of advertising or on any label unless the wording or display has been approved, in writing, by the Secretary.
6. This approval may be revoked at any time —
  - (a) if any of the conditions made by this approval are not complied with; or
  - (b) if the circumstances in which this approval was made change.
7. Unless revoked, this approval will expire automatically on **21 May 2002**

DATED THIS **Thirtieth** DAY OF **May** 1997



**Peter Francis McKay**



**10. Attachment 1: USDA Guidelines**

**USDA Guidelines for Obtaining Authorisation of  
Compounds to be used in meat and poultry plants Part 5**

U. S. Department of Agriculture  
Food Safety and Inspection Service  
Agriculture Handbook No. 562

## Part 5. Compounds and Their Acceptable Uses

### Section 5.1 - Cleaning compounds

#### (A) General use criteria

1. Neutral, or mildly alkaline preparations consisting of any combination of soaps, detergents, wetting agents, emulsifiers, solubilizers, common inorganic builders may be used on any surface in any department.
2. Strongly alkaline preparations (those containing in excess of 20 percent caustic soda or other ingredients with the equivalent causticity thereof) may be used only in soak tanks or with steam or mechanical cleaning devices in any department.
3. Acidic preparations consisting of mineral acids, organic acids, or acidic salts may be used in any department for the removal of rust, corrosion, scale, or other deposits which are not readily removed by alkaline preparations.

#### (B) Restrictions of use

1. Before using any cleaning preparation, food products and packaging materials must be removed from the room or carefully protected. After using such preparations, all surfaces must be thoroughly rinsed with potable water.
2. Preparations having a characteristic odor or fragrance as diluted for use which may, in the opinion of USDA, interfere with the sanitary inspection of food contact surfaces may not be used on food contact surfaces. They may be authorised for limited use on floors and walls only.
3. Preparations containing abrasive materials such as silica, pumice, etc., may be used on food contact surfaces only if care is taken to remove all odours or residues resulting from their use by thorough rinsing with potable water.
4. Boric acid and salts thereof, may be used in such preparations only at concentrations up to 90 percent in association with strong acids, strong alkalis, soaps, or synthetic detergents.

### Section 5.2 - Compounds for laundry use

#### (A) For all fabrics

Preparations consisting of soaps, synthetic detergents, alkaline builders, or any combination thereof are permitted for laundering shrouds, uniforms, aprons, or other fabrics used in the plant. Fluorescent dyes or optical bleaches may also be added if USDA has sufficient information on them to assure their safe use. Sours consisting of acetic acid, sodium bisulfate, or other acceptable acidic materials are permitted to neutralise excess alkalinity in all laundered fabrics. Acidic substances specifically unacceptable for such use are listed in Part 7 of these guidelines. Chlorine or oxygen bleaches are permitted to remove stains or maintain whiteness of all fabrics. In all cases, the final operation of the laundry cycle must be a potable water rinse sufficient to remove all added substances from the laundered fabric.

#### (B) For fabrics other than shrouds

In addition to the preparations referred to above, fabric softeners, or antistatic agents, and starches may be used on uniforms, aprons, or other wearing apparel. Also, the presence of a perfume or other odorant in a laundry compound may exclude its use on shrouds.

### **Section 5.3 - Compounds used in inedible product processing areas, and/or nonprocessing areas**

The following compounds are limited to use in areas of federally Inspected meat and poultry plants where edible products are neither processed nor stored in open containers. Their use on loading docks or other similar areas is left to the discretion of the Inspector in Charge at the plant.

- (A) Compounds such as odor control compounds; air deodorants or sanitisers; cleaning or sanitizing compounds containing heavy perfume, pine oil, isomers of dichlorobenzene, etc.; or other similar compounds containing odorous substances are not acceptable for use in edible product processing areas because they may mask an odor resulting from poor sanitation rather than correct the situation. Compounds containing isomers of dichlorobenzene or other substances toxic by inhalation may be used only in areas where there is adequate ventilation to prevent the accumulation of hazardous vapours.
- (B) So called spray and wipe cleaners, or other similar compounds are not acceptable for use in edible product processing areas because they are designed for use without a rinse. The use of all cleaning compounds in edible product processing areas must be followed by a potable water rinse.

### **Section 5.4 - Sanitizing compounds**

- (A) Equipment and utensils (hard, non-porous food contact surfaces)

Sanitizing solutions may be used on hard non-porous food contact surfaces such as equipment and utensils without a following potable water rinse under these conditions:

- (1) Such surfaces are thoroughly drained and any collection of liquid removed therefrom before contact with food products is made.
- (2) The sanitizing solutions are used in accordance with label directions.
- (3) The sanitizing solutions consist of one of the following, to which may be added components generally recognised as safe (GRAS) and components which are permitted by prior sanction or approval. (Also see Section 6.4(A))

**IMPORTANT NOTE:** In order to be acceptable for use without a rinse, solutions must contain all ingredients required in the applicable sub-paragraph of this paragraph and may not contain any ingredients which are not GRAS, prior-sanctioned, or covered in the applicable sub-paragraph of this paragraph.

- (a) An aqueous solution containing potassium, sodium, or calcium hypochlorite, with or without the bromides of potassium, sodium, or calcium.
- (b) An aqueous solution containing dichloroisocyanuric acid, trichloroisocyanuric acid, or the sodium or potassium salts of these acids, with or without the bromides of potassium, sodium, or calcium.

- (c) An aqueous solution containing potassium iodide, sodium p-  
toluenesulfonchloroamide, and sodium lauryl sulfate.
- (d) An aqueous solution containing iodine, butoxy monoether of mixed (ethylene-propylene) polyalkylene glycol having a cloud-point of 90°C.-100°C in 0.5 percent aqueous solution and an average molecular weight of 3,300, and ethylene glycol monobutyl ether. Additionally, the aqueous solution may contain diethylene glycol monoethyl ether as an optional ingredient.
- (e) An aqueous solution containing elemental iodine, hydriodic acid, alpha-(p-nonylphenyl)-omega-hydroxypoly(oxyethylene) (having a maximum average molecular weight of 748 and otherwise complying with appropriate FDA regulations) and/or polyoxyethylene-polyoxypropylene block polymers (having a minimum average molecular weight of 1,900). Additionally, the aqueous solution may contain isopropyl alcohol as an optional ingredient.
- (f) An aqueous solution containing elemental iodine, sodium iodide, sodium dioctylsulfosuccinate, and polyoxyethylene-polyoxypropylene block polymers (having a minimum average molecular weight of 1,900).
- (g) An aqueous solution containing dodecylbenzenesulfonic acid and polyoxyethylene-polyoxypropylene block polymers (having a minimum average molecular weight of 2,800).
- (h) An aqueous solution containing elemental iodine, butoxy monoether of mixed (ethylene-propylene) polyalkylene glycol (having a minimum average molecular weight of 2,400), and alpha-lauroyl-omega-hydroxypoly (oxyethylene) with an average 8-9 moles of ethylene oxide and an average molecular weight of 400.
- (i) An aqueous solution containing n-alkyl (C<sub>12</sub>-C<sub>18</sub>) benzyldimethylammonium chloride compounds having average molecular weights of 351-380 and consisting principally of alkyl groups with 12-16 carbon atoms with or without not over 1 percent each of groups with 8 and 10 carbon atoms. Additionally, the aqueous solution may contain isopropyl alcohol as an optional ingredient.
- (j) An aqueous solution containing trichloromelamine and either sodium lauryl sulfate or dodecylbenzenesulfonic acid.
- (k) An aqueous solution containing equal amounts of n-alkyl (C<sub>12</sub>-C<sub>18</sub>) benzyldimethylammonium chloride and n-alkyl (C<sub>12</sub>-C<sub>18</sub>) dimethylethylbenzylammonium chloride (having an average molecular weight of 384).
- (l) An aqueous solution containing the sodium salt of sulfonated oleic acid and polyoxyethylene-polyoxypropylene block polymers (having an average molecular weight of 2,000 and 27 to 31 moles of polyoxypropylene). All equipment and utensils treated with this sanitizing solution shall have a drainage period of 15 minutes prior to use in contact with food.
- (m) An aqueous solution containing elemental iodine and alkyl (C<sub>12</sub>-C<sub>15</sub>) monoether of mixed (ethylene-propylene) polyalkylene glycol, having a cloud point of 70°-77°C in 1 percent aqueous solution and an average molecular weight of 807.

- (n) An aqueous solution containing iodine, butoxy monoether of mixed (ethylene-propylene) polyalkylene glycol, having a cloud point of 90°-100°C in 0.5 percent aqueous solution and an average molecular weight of 3,300, and polyoxyethylene-polyoxypropylene block polymers (having a minimum molecular weight of 2,000).
  - (o) An aqueous solution containing lithium hypochlorite.
  - (p) An aqueous solution containing equal amounts of n-alkyl(C<sub>12</sub>-C<sub>18</sub>) benzyl dimethyl ammonium chloride and n-alkyl(C<sub>12</sub>-C<sub>14</sub>) dimethyl ethylbenzyl ammonium chloride (having average molecular weights of 377-384), with the optional adjuvant substances tetrasodium ethylenediaminetetraacetate and/or alpha-(p-nonylphenol)-omega-hydroxypoly(oxyethylene) having an average poly(oxyethylene) content of 11 moles. Alpha-hydro-omega-hydroxy-poly(oxyethylene) poly(oxypropylene)(15 to 18 mole minimum) poly(oxyethylene) block copolymer, having a minimum molecular weight of 1,900, may be used in lieu of alpha-(p-nonylphenol)-omega-hydroxypoly(oxyethylene) having an average poly(oxyethylene) content of 11 moles.
  - (q) An aqueous solution containing di-n-alkyl (C<sub>8</sub>-C<sub>10</sub>) dimethyl ammonium chlorides, having average molecular weights of 330-361 and isopropyl alcohol.
  - (r) An aqueous solution containing n-alkyl(C<sub>12</sub>-C<sub>18</sub>) benzyldimethylammonium chloride, sodium metaborate, alpha-terpineol and alpha[p-(1,1,3,3-tetramethylbutyl) phenyl]-omega-hydroxypoly(oxyethylene) produced with one mole of the phenol and 4 to 14 moles ethylene oxide.
  - (s) An aqueous solution containing sodium dichloroisocyanurate and tetrasodium ethylenediaminetetraacetate.
  - (t) An aqueous solution containing ortho-phenylphenol, ortho-benzyl-para-chlorophenol, para-tertiaryamylphenol, sodium-alpha-alkyl (C<sub>12</sub>-C<sub>15</sub>)-omega-hydroxypoly(oxyethylene) sulfate with the poly(oxyethylene) content averaging one mole, potassium salts of coconut oil fatty acids, and isopropyl alcohol or hexylene glycol.
  - (u) An aqueous solution containing sodium dodecylbenzenesulfonate.
- 4) The solutions identified in paragraph (3) must not exceed the following concentrations:
- (a) Solutions identified in sub-paragraphs (3) (a) and (3) (o) will provide not more than 200 parts per million of available halogen determined as available chlorine.
  - (b) Solutions identified in sub-paragraph (3) (b) and (3)(s) will provide not more than 100 parts per million of available halogen determined as available chlorine.
  - (c) Solutions identified in sub-paragraphs (3)(c), (3)(d), (3)(e), (3)(f), (3)(h), (3)(m), and (3)(n) will contain iodine to provide not more than 25 parts per million of titratable iodine. The adjuvants used with the iodine will not be in excess of the minimum amount required to accomplish the intended technical effect.

- (d) Solutions identified in sub-paragraph (3)(g) will provide not more than 400 parts per million of dodecylbenzenesulfonic acid and not more than 80 parts per million of the block polymers identified in the sub-paragraph
- (e) Solutions identified in sub-paragraphs (3)(i), (3)(k) and (3)(p) will provide no more than 200 parts per million of the active quaternary compound when ready to use
- (f) Solutions identified in paragraph (3)(j) will not provide more than sufficient trichloromelamine to produce 200 parts per million of available chlorine and either sodium lauryl sulfate at a level not in excess of the minimum required to produce its intended functional effect or not more than 400 parts per million of dodecylbenzenesulfonic acid
- (g) Solutions identified in sub-paragraph (3)(l) will not provide more than 200 parts per million of sulfonated oleic acid, sodium salt
- (h) Solutions identified in sub-paragraph (3)(q) will not provide more than 150 parts per million of the active quaternary compound when ready to use
- (i) Solutions identified in sub-paragraph (3)(r) will not provide more than 200 parts per million of active quaternary compound and not more than 66 parts per million of alpha[p-(1,1,3,3-tetramethylbutyl)phenyl]omega-hydroxypoly(oxyethylene)
- (j) Solutions identified in sub-paragraph (3)(t) are for single use applications only and will provide, when ready to use, a level of 800 parts per million of total active phenols consisting of 400 parts per million ortho-phenyl-phenol, 320 parts per million ortho-benzyl-para-chlorophenol and 80 parts per million para-tertiaryamylphenol
- (k) Solutions identified in sub-paragraph (3)(u) will not provide more than 430 parts per million and not less than 25 parts per million of sodium dotecylbenzenesulfonate
- (5) The use of sanitizing solutions (other than those described in paragraphs (3) and (4) above) or combination cleaner-sanitisers on hard non-porous food contact surfaces, such as equipment and utensils, must be followed by a potable water rinse. Such solutions must be used in a manner which does not result in the contamination of food products subsequently processed.

(B) Equipment and utensils (porous and semi-porous surfaces)

Concentrations of sanitizing solutions considerably higher than those described in paragraph (A)(4) above are necessary to provide efficacy in sanitizing porous and semiporous surfaces. Any sanitizing solution or combination cleaner-sanitiser may be used on such food contact surfaces at the concentration recommended on the label provided that such use is followed by a potable water rinse and does not result in the contamination of food products subsequently processed.

(C) Ceilings, floors, and walls.

Sanitizing solutions described in paragraph (A)(3) may be used for mould control on such surfaces at concentrations considerably higher than those described in paragraph (A)(4) without a potable water rinse unless, in the judgment of the Inspector in Charge at the plant, such use results in

residues which may contaminate food products subsequently processed or be otherwise objectionable. The use of other sanitizing solutions or combination cleaner/sanitizers must be followed by a potable water rinse.

## **Section 5.5 - Compounds for employee hand care**

### **(A) General use criteria**

1. Only liquid soaps or detergents in suitable dispensing devices are allowed for hand washing in the slaughtering or food processing areas of the plant.
2. Powdered or abrasive hand cleaners in suitable dispensing devices may be used in toilets and dressing rooms and other non-processing areas. Such cleaners may contain up to 90 percent sodium borate (borax), or other abrasive material, in combination with soaps or detergents and other adjuvants common to such preparations.
3. Waterless hand cleansers and hand lotions or creams may also be used in toilets and dressing rooms or other non-processing areas. However, employees who handle food products may use them only when leaving the plant for the day.
4. Those solutions described in Section 5.4(A) of these guidelines which are applicable for the purpose may be used to sanitise the hands of employees handling meat food products without a subsequent rinse provided that they are germicidally equivalent to 50 ppm chlorine. (See Section 4.4(B) for method.) Hand sanitising is not a substitute for hand washing. Accordingly, such sanitising solutions may be used only after thorough hand washing with soaps or detergents and water followed by rinsing with potable water.
5. Combination detergent-germicides (single step preparations designed to combine hand washing and sanitising) will be considered for authorisation on the basis of their ability to effectively clean the hands as well as their equivalency to 50 ppm available chlorine. (See Section 4.4(b) for method.) The hands need not be washed with soap or detergent prior to use of such preparations. However, the hands must be rinsed with potable water after use of the preparations and before handling food again.

### **(B) Restrictions of use**

1. The intent of the requirement that employees wash and sanitise their hands is to provide for quick and effective removal of transient bacteria which may contaminate the hands as a result of handling raw meat or poultry products, or using lavatory facilities. To insure that preparations for which hand sanitising claims are made meet that intent, data must be provided to determine that the preparations are germicidally equivalent to 50 ppm available chlorine. The protocol for gathering such data is given in Section 4.4(B) of these guidelines. The germicidal equivalency must be confirmed by USDA as a prerequisite to authorisation.
2. Preparations which leave a residual fragrance on the hands after rinsing, which in the opinion of USDA, may interfere with the inspection of food products, may not be used in food processing areas or by employees who handle food products.

## Section 5.6 - Pesticides

Elimination of vermin in and around plants is vital to the maintenance of good sanitation. Such pests are most effectively controlled by preventing their breeding and/or preventing their entrance into plants. This may be accomplished only through a program designed to eliminate all areas outside the plant where these pests may breed or be sheltered. The construction of the plant itself should, insofar as possible, prevent the pests from gaining entrance. When vermin do gain entrance, in spite of vigorous attempts to keep them out, certain eradication methods are permitted. A brief outline of methods used and specific substances permitted follows.

### (A) Insecticides

#### 1. Contact sprays, space sprays, and aerosols

##### (a) Nonresidual

So-called knockdown sprays containing pyrethrum extracts or other substances not having residual killing action may be used in places where edible products are handled, provided that exposed edible products are removed, covered or stored in closed containers. Facilities and equipment must be thoroughly washed with an effective cleaning compound and rinsed with potable water after spraying.

(i) The following nonresidual insecticides may be used:

- Allethrins
- Lethanes
- Pyrethrins
- Pyrethrum extract
- Synthetic pyrethroids

(ii) The following synergists, singly or in combination, may be used in conjunction with the insecticides in Section 5.6 (A)(1)(a)(i):

- Piperonyl butoxide
- Piperonal bis[2-(butoxyethoxy)ethyl] acetal  
(Tropital)
- N-Octyl bicycloheptane dicarboximide (MGK 264)
- n-Propyl isome
- Sulfoxide

In contact and space sprays, the concentration of total synergists in the insecticide may not exceed one (1) percent based on the active content of the synergists. The concentration of synergists may be increased to a maximum of 5 percent, if the insecticide is dispensed as an aerosol spray from an adequate fogging device. An aerosol spray is defined by the Office of Pesticide Programs, EPA, as one in which none of the droplets exceeds 50 microns in diameter and 80 percent of the droplets are less than 30 microns in diameter.

(b) Residual

In contrast to nonresidual substances, there are residual insecticides which kill insects over an extended period of time. They are effective when used in conjunction with sound sanitation and maintenance programs. However, affected insects may fall into food products since there is no practical way to protect food products during operations. Therefore, the use of residual insecticides as contact sprays, space sprays, or aerosol sprays is restricted to inedible product areas or outside premises where exposed food products are neither processed nor stored in open containers. Also, precautions must be taken to prevent insecticide mist or affected insects from entering edible product processing or storage areas through open windows, ventilating systems, moveable equipment, clothing, etc. The following residual insecticides may be used:

Baygon	Dipterex
Carbaryl (Sevin)	Fenthion (Entex)
Chlordane	Kepone
Chlorpyrifos (Dursban, Dowco 179)	Lindane
Diazinon	Malathion
Dichlorvos (DDVP, Vapona)	Methoxychlor
Dimethoate	Ronnel

2. Crack and crevice treatment

The insecticides referred to in paragraph (A)(1)(a) and (A)(1)(b) of this section may be used for a single crack and crevice treatment in edible product processing areas; warehouse areas where edible product, ingredients, and packaging material are stored in sealed containers; and nonprocessing areas such as office, maintenance areas, employee locker room, etc.; provided that the following conditions are met:

- (a) Production operations are not conducted in the area at time of treatment.
- (b) All exposed edible product and packaging materials are removed, covered, or stored in closed containers.
- (c) Plant management informs the Inspector in Charge of the treatment schedule. The Inspector in Charge will determine to what extent an inspector must be present during the chemical application based on past experience with the insecticide applicator and the degree of control exercised by plant management. The need for the presence of an inspector during the chemical application may be minimised if experience has demonstrated the reliability of plant management and insecticide applicator. When the Inspector in Charge does not assign an inspector to be present during treatment, he may require the plant to identify the proposed treatment sites in advance to permit review during an inspector's normal tour of duty. He may also permit the treatment sites to be recorded at the time of treatment for later review by the inspector.
- (d) They are not used for area treatment such as misting or fogging, or for surface treatment such as at floor-wall junctions in rooms where their use is restricted to crack and crevice treatment.

- (e) When used in offices, welfare areas, etc., insecticides must be used so that they will not be transferred to employees' clothing or other materials that may contact product.
- (f) After treatment, the areas are ventilated to remove insecticide odours, and the facilities and equipment are thoroughly washed with an acceptable detergent solution and rinsed with potable water to remove all traces of contamination.
- (g) The treated cracks and crevices are sealed with appropriate material within a reasonable period of time after treatment. The Inspector in Charge may include major projects in a plant improvement program.

If adherence to all above provisions does not result in elimination of the insect infestation, the inspector in charge may permit repeated treatments under the same provisions. However, he must continue to require sound construction, sanitation, and maintenance programs to avoid hazards related to chemical use.

Requests by plant management for residual insecticide treatment programs not covered by this section must be submitted through the inspector in charge to the Facilities, Equipment, and Sanitation Staff, Technical Services.

### 3. Automatic insecticide dispensing systems

- (a) The insecticides referred to in paragraph (A)(1)(a) of this section may be dispensed automatically in all areas of plants. They may be dispensed automatically in edible product processing or storage areas only when food products are not being processed or stored in open containers. The use of nonresidual insecticides on an intermittent basis (less than 24-hours a day) may significantly affect the efficacy of the insecticides. Therefore, registered labels for nonresidual insecticides proposed for automatic dispensing in edible product areas must include directions for less than 24-hour operations to substantiate their efficacy under those conditions. Nonresidual insecticides may be dispensed automatically in inedible product areas 24 hours a day provided that precautions are taken to prevent entry of the insecticide mist or affected insects into edible product areas through open windows, ventilating systems, moveable equipment, clothing, etc.
- (b) The residual insecticides referred to in paragraph (A)(1)(b) of this section may be dispensed automatically only in inedible product areas of plants. They may be dispensed 24 hours a day provided that precautions are taken to prevent entry of the insecticide mist or affected insects into edible product areas through open windows, ventilating systems, moveable equipment, clothing, etc.

### 4. Powdered or granular insecticides

- (a) The insecticides referred to in paragraph (A)(1)(a) or A(1)(b) of this section, as well as borax, boric acid, derris or cube root, silica aerogel, and sodium fluoride mixed with inert ingredients such as clay, sugar, or talc, may be used for the control of flies, roaches, or other insects in inedible product areas or outside premises under circumstances which absolutely prevent contact with food products.
- (b) To minimise the possibility of undetected contamination of food products, all powdered or granular insecticides, except those marketed exclusively in labelled

dispenser containers, must be colored a definite blue or green. Any dye or pigment which imparts a definite blue or green colour to the mixture may be used.

(B) Fumigants

- (1) Hydrocyanic acid gas, methyl bromide gas, or phosphine gas generated from aluminium phosphide may be used for the eradication of insects specified on the registered pesticide label. Hydrocyanic acid gas and methyl bromide gas may also be used for the eradication of rodents specified on the registered pesticide label. Raw uncured meat and poultry product must be removed from the room before fumigating. Uncooked cured hams and bacon, cooked sausage, or packaged product need not be removed.
- (2) Gases other than those referred to in paragraph (B) (1) of this section may be used for purposes specified by USDA according to directions specified on the registered pesticide label. All edible products and their packaging materials must be removed from rooms to be fumigated. All food contact surfaces must be rinsed with potable water before products are returned.
- (3) Since all gases referred to in paragraphs (B)(1) and (B)(2) of this section are extremely poisonous to man as well as vermin, permission for their use must first be obtained from the Inspector in Charge; and a competent, experienced person must be placed in direct charge of the fumigating operation. After fumigating, the room must be well ventilated before inspectors or plant personnel re-enter the room. Ventilation must also be sufficient to assure complete removal of the gas from the surfaces contacted. The fumigating equipment used must be so constructed and controlled as to positively prevent any of the liquid or powdered fumigant from escaping. Only the gas should be permitted to escape from the fumigating equipment.

(C) Rodenticides

In general, rodenticides are not allowed to be placed in edible product departments until operations have ceased for the day and all uncovered products have been removed from the area. Strict account must be kept of the location and number of stations in the area and the floor plan layout must be approved by the Inspector in Charge. Rodenticides may not be placed in dry salt cellars. They may remain in areas containing sealed, packaged meats, but care must be taken to place them so as to prevent contamination of the meat. All rodenticides and their containers must be removed from edible product departments before operations are resumed. All rodenticides and associated supplies must be stored in a separate place designed by the Inspector in Charge.

- (1) The following rodenticides may be used:

3-(alpha-Acetyl-furfuryl)-4-hydroxycoumarin (Fumarin)  
3-(alpha-Acetyl-furfuryl)-4-hydroxycoumarin, sodium salt  
(Fumarin)  
alpha-Naphthyl-thiourea (ANTU)  
2-[p-Chlorophenyl]phenylacetyl-1,3-indandione (Chlorophacinone, Rozol)  
Diphacinone (Diphacin)  
Diphacinone, sodium salt  
2-Isovaleryl-1,3-indandione (PMP, Valone)  
2-Pivalyl-1,3-indandione (Pival)  
2-Pivalyl-1,3-indandione, sodium salt (Pivalyn)

Prolin  
Red squill  
Vacor (DLP 787)  
Warfarin [3-alpha-(Acetylbenzyl)-4-hydroxycoumarin  
Warfarin, sodium salt  
Zinc phosphite

(2) Baits

- (a) The rodenticides referred to in paragraph (C)(1) of this section may be mixed with dry inert materials such as grains, meals, or flours to form dry baits. All dry baits must be secured in bait boxes in order to be used anywhere in meat or poultry plants. Liquid formulations may also be used if contained in a bait fountain and placed in a bait box.
- (b) To minimise the possibility of undetected contamination of food products, all liquid baits, and dry baits in which the inert ingredients consist mainly of meal or flour, must be coloured a definite blue or green. Where inert ingredients consist mainly of whole or cracked grain, or flour or meal pressed into cakes or pellets that do not have characteristics of food products, no addition of colour is necessary.

(3) Tracking powders

Tracking powders consisting of the rodenticides listed in paragraph (C)(1) of this section and inert materials coloured a definite blue or green may be used in all departments, provided that processing operations have ceased, all exposed products are removed, and their use does not create a nuisance. After the powders are removed, floors must be washed with an effective cleaning compound and/or rinsed with potable water to remove all evidence of the tracking powders before operations are resumed.

(4) Sticky boards

Board strips covered with extremely adhesive resinous material may be used to capture rodents. Since the adhesive does not contain a rodenticide, board strips may be used in all departments provided that their use does not create a nuisance.

### **Section 5.7 - Potable water treatment compounds**

Not approved under the AQIS system

### **Section 5.8 -Cooling and retort water treatment compounds**

Preparations containing one or more of the substances listed below, or others subsequently appearing in the appropriate regulations, may be used in the retort water, washing spray, or cooling water for canned products. Unless a limitation is otherwise stated, the preparation should be used in the minimum amount sufficient for the purpose.

<b>Substances</b>	<b>Limitations</b>
Calcium chloride	
Citric acid	
Diocetyl Sodium Sulfosuccinate	Maximum of 0.05% in water

Disodium-calcium ethylene-diaminetetraacetate	
Disodium ethylenediamine-tetraacetate	
Disodium phosphate	
Ethylenediaminetetraacetic acid	
Isopropanol	Maximum of 0.002% in water
Potassium pyrophosphate	
Propylene glycol	
Sodium n-alkylbenzene sulfonate (alkyl group predominantly C <sub>12</sub> and C <sub>13</sub> and not less than 95 percent C <sub>10</sub> to C <sub>16</sub> .)	Maximum of 0.05% in water
Sodium bicarbonate	
Sodium bisulfate	Maximum of 0.001% in water
Sodium carbonate	
Sodium dodecylbenzene sulfonate	Maximum of 0.05% in water
Sodium gluconate	Sodium hexametaphosphate
Sodium lauryl sulfate	Maximum of 0.05% in water
Sodium metasilicate	
Sodium nitrite	See note below
Sodium pyrophosphate	Maximum of 0.05% in water
Sodium tripolyphosphate	Ditto
Zinc oxide	Maximum of 0.01% in water
Zinc sulfate	Ditto

**Note:**

The use of sodium nitrite in meat establishments is limited to 600 parts per million of the treated water. The dry nitrite must be decharacterised with 0.05 percent powdered charcoal. Bulk decharacterised sodium nitrite, when in cook room, shall be held in locked metal bin or container conspicuously labelled "Decharacterised Sodium Nitrite--to be used by authorised personnel only."

**Section 5.9 - Boiler treatment compounds**

A) Preparations containing one or more of the substances listed below are permitted for the treatment of water in boilers for producing steam that may contact food products. [Also see Section 6.4 (B)1]

<b>Substances</b>	<b>Limitations</b>
Acrylamide-sodium acrylate resin	Contains not more than 0.05% by weight of acrylamide monomer
Ammonium alginate	
Cobalt sulfate (as catalyst)	
Lignosulfonic acid	

Monobutyl ethers of polyethylene-polypropylene glycol produced by random condensation of 1:1 mixture by weight of ethylene oxide and propylene oxide with butanol	Minimum mol. wt. 1,500
Polyoxyethylene glycol	Mean mol. wt. 200-9,500
Polyoxypropylene glycol	Minimum mol. wt. 1,000
Potassium carbonate	
Potassium hydroxide	
Potassium tripolyphosphate	
Sodium acetate	
Sodium alginate	
Sodium aluminate	
Sodium bisulfate	
Sodium bisulfite	See notes (1) and (2) below
Sodium carbonate	
Sodium carboxymethylcellulose	Contains not less than 95 percent sodium carboxy-methylcellulose on a dry weight basis, with maximum substitution of 0.9 carboxy- methyl groups per anhydro-glucose unit, and with a minimum viscosity of 15 centipoises for 2 percent by weight aqueous solution at 25°C; such determinations to be made by methods prescribed in Food Chemicals Codex (Second Edition) mono- graph for sodium carboxy- methylcellulose
Sodium glucoheptonate	
Sodium hexametaphosphate	
Sodium humate	
Sodium hydroxide	
Sodium lignosulfonate	
Sodium metabisulfite	See notes (1) and (2) below
Sodium metasilicate	
Sodium nitrate	See Note (1) below
Sodium phosphate (mono-, di-, tri)	
Sodium polyacrylate	
Sodium polymethacrylate	
Sodium silicate	
Sodium sulfate	

Sodium sulfite See notes (1) and (2) below  
 Sodium tripolyphosphate  
 Tannin (including Quebracho extract)  
 Tetrasodium EDTA  
 Tetrasodium pyrophosphate

Notes:

- (1) To promote handling of preparations containing sodium nitrate, sodium sulfite, sodium bisulfite, and sodium metabisulfite in a manner as to prevent their use in meat products, such preparations must be adequately decharacterized. The preparation is considered to be acceptable if the nitrate, sulfite, bisulfite, or metabisulfite present is decharacterized by 33 percent of its weight of sodium hydroxide; by 50 percent of its weight of trisodium phosphate; by 100 percent of its weight of sodium carbonate; or if the preparation contains not less than 5 percent tannin, lignin, sodium lignosulfonate, or sodium humate.
- (2) Compounds containing sulfite ion may not be added to meat or other foods recognised as a source of vitamin B1. Therefore, precautions must be taken to ensure that compounds containing sulfite ion are not entrained or otherwise carried over in steam that will contact meat products.

B) Preparations containing one of the substances listed below, alone or in combination with the substances listed in paragraph (A) of this section, are permitted in systems where steam is used for cooking food products, or rendering and deodorising fats.

Substances	Limitations
Cyclohexylamine	Not to exceed 10 ppm in steam
Diethylaminoethanol	Not to exceed 15 ppm in steam
Hydrazine	Zero ppm in steam
Morpholine	Not to exceed 10 ppm in steam (Also see note below)
Octadecylamine	Not to exceed 3 ppm in steam
Trisodium nitrilotriacetate	Not to exceed 5 ppm in boiler

Note:

There is pending at this time a proposal to revoke the use of morpholine as a boiler treatment chemical. Therefore, the status of that material is subject to change depending on the final action taken by FDA.

### **Section 5.10 - Compounds for steam lines or primary cooling water loops**

There is no specific list of substances which may be used to treat water in boiler or steam lines which produce or carry steam for purposes other than direct food contact, or water in cooling systems which indirectly cool food products or substances that may be incorporated into a food product. Examples are water or steam therefrom used in a steam jacketed kettle,

or cooling water which passes through a jacketed kettle. Most substances generally used for that purpose would be acceptable. However, there are the following restrictions:

- (A) Compounds containing sodium borate, sodium nitrite, sodium nitrate, or any combination thereof may be used only if they are decharacterized by the addition of a blue or green dye at 2.5 percent of the sodium borate or sodium nitrite present. If both sodium borate and sodium nitrite are present, the decharacterization must be based on the concentration of sodium nitrite. If both sodium nitrite and sodium nitrate are present, the decharacterization must be based on the concentration of sodium nitrite present including that resulting from the reduction of sodium nitrate.
- (B) Compounds containing sodium sulfite, sodium bisulfite, or sodium metabisulfite may be used only if they are decharacterized by one of the methods specified in Section 5.9 (A)(1) of this publication.
- (C) Compounds containing salts of chromic acid may not be used.
- (D) There may be other compounds which would be unacceptable or restricted because of unfavourable toxicity or considerations. Each compound submitted will be evaluated on its own merit.

### **Section 5.11 - Poultry scald media**

Not approved under the AQIS system

### **Section 5.12 - Hog Scald media**

Preparation containing one or more of the substances listed below, or others subsequently appearing in the appropriate regulation, are permitted for the dehairing of hog carcasses at a level sufficient for the purpose providing that they are removed by subsequent rinsing operations.

Caustic soda (sodium hydroxide)

Dimethyl polysiloxane

Dioctyl sodium sulfosuccinate

Disodium calcium ethylene diaminetetraacetate

Disodium ethylenediamine tetraacetate

Ethylene diaminetetraacetic acid

Lime (calcium oxide, calcium hydroxide)

Propylene glycol

Soap (prepared by reaction of Sodium tripolyphosphate calcium, potassium, or sodium hydroxide with rosin or fatty acids of natural fats or oils).

Sodium acid pyrophosphate

Sodium carbonate

Sodium dodecylbenzene sulphonate

Sodium hexametaphosphate

Sodium pyrophosphate

Sodium sulfate

Sodium n-alkylbenzene sulphonate (alkyl group predominantly C<sub>12</sub> and C<sub>13</sub> and not less than 95 percent C<sub>10</sub> to C<sub>16</sub>).

Sodium lauryl sulfate

Sodium metasilicate

Sucrose

Trisodium phosphate

### **Section 5.13 - Tripe processing compounds**

Preparations containing one or more of the substances listed below, or others subsequently appearing in the appropriate regulation, are permitted for the denuding, bleaching, or neutralising of tripe at a level sufficient for the purpose providing that they are removed by subsequent rinsing operations.

Citric acid

Hydrogen peroxide

Lime (calcium oxide, calcium hydroxide)

Sodium carbonate

Sodium gluconate

Sodium hydroxide

Sodium metasilicate

Sodium persulfate

Trisodium phosphate

### **Section 5.14 - Fruit and vegetable washing compounds**

Not approved under the AQIS system

### **Section 5.15 - Lubricants**

- A) Preparations consisting of one or more of the materials listed below, others subsequently appearing in the appropriate regulation, or those generally recognised as safe (CFR, Title 21, Part 182) are permitted for use as lubricants and anti-rust agents, or as release agents on gaskets or seals of tank closure, where there is a possibility of incidental food contact. The amount used should be the minimum required to accomplish the required technical effect on the equipment so treated. [Also see Section 6.4(D)]

#### **Substances**

#### **Limitations**

Acetylated monoglycerides

Aluminium stearate

Aluminium stearoyl benzoyl hydroxide

For use as a thickening agent in mineral oil lubricants at a level not to

	exceed 10 percent by weight of the mineral oil
BHA	
BHT	
alpha Butyl omega hydroxypoly (oxyethylene)poly(oxypropylene) having a minimum molecular weight of 1500.	Addition to food not to exceed 10 parts per million. Must comply with CFR, Title 21, Part 178, Section 178.3570(a)(3).
alpha Butyl omega hydroxypoly (oxypropylene) having a minimum molecular weight of 1500.	Addition to food not to exceed 10 parts per million.
Castor oil	
Castor oil, dehydrated	
Castor oil, partially dehydrated	
Dialkyldimethylammonium aluminium silicate where the alkyl groups are derived from hydrogenated tallow fatty acids (C <sub>14</sub> -C <sub>18</sub> ) and where the aluminium silicate is derives from bentonite	For use only as a gelling agent in mineral oil lubricants at a level not to exceed 7 per cent by weight of the mineral oil
Dimethylpolysiloxane (viscosity greater than 300 centistokes)	
Fatty acids derived from animal or vegetable sources, and the hydrogenated forms of such fatty acids	
alpha Hydro omega hydroxypoly(oxyethylene)poly(oxypropylene) having a minimum molecular weight of 1500.	Addition to food not to exceed 10 parts per million. Must comply with CFR, Title 21, Part 178, Section 178.3570(a)(3).
12-Hydroxystearic acid	
Isopropyl oleate	For use only as an adjuvant to improve lubricity in mineral oil lubricants
Magnesium ricinoleate	For use only as an adjutant in mineral oil lubricants at a level not to exceed 10 percent by weight of the mineral oil
Mineral oil	Must comply with CFR, Title 21, Part 178, Section 178.3620 (a) or (b)
Petrolatum	Must comply with CFR, Title 21, Part 178 Section 178.3700
Phenyl-alpha- and/or phenyl-beta-naphthylamine	For use only singly or in combination, as antioxidants in mineral oil lubricants at a level not to exceed a total of one (1) per cent by weight of the mineral oil
Polybutene (minimum average molecular weight 80,000)	
Polybutene, Hydrogenated	Must comply with CFR, Title 21, Part 178 Section 178.3740(b)
Polyethylene	
Polyisobutylene (average molecular weight	For use only as a thickener in mineral oil

35,000 140,000)	lubricants
Polysorbate 60	As a thickener and stabiliser, at a level not to exceed 2 per cent by weight of lubricants. Must comply with CFR, Title 21, Part 178, Section 178.3400
Polyurea, having a nitrogen content 9-14 percent based on the dry polyurea weight, produced by reacting toluene diisocyanate with tall oil fatty acid (C <sub>16</sub> and C <sub>18</sub> ) amine and ethylene diamine in a 2:2:1 molar ratio	For use as an adjunct in mineral oil lubricants at a level not to exceed 10 percent by weight of the mineral oil
Sodium nitrite	For use only as a rust preventative in mineral oil lubricants at a level not to exceed 3 percent by weight of the mineral oil
Sorbitan monooleate	For use as a rust preventative in mineral oil lubricants. Must comply with CFR, Title 21, Part 178, Section 178.3400
Tetrafluoroethylene fluorocarbon polymers	Must comply with CFR, Title 21, Part 177, Section 177.1550

B) There is no specific list of substances which may be used as lubricants where there is no possibility of food contact. Most substances generally used for the purpose in industry would be acceptable. Substances which are categorically unacceptable for such use are listed among the substances in Part 7 of this publication. There may be other substances which are not acceptable because of unfavourable toxicology or other consideration. Therefore, each preparation will be evaluated on its own merit.

### **Section 5.16 - Sewer and drain treatment compounds**

Preparations containing strong acids, strong alkali, and those containing enzymes, bacteria or a combination thereof, may be used for the treatment of drains, sewers, or connecting lines in any department. Special requirements concerning bacterial/enzyme preparation are given in Section 4.4 (A) of this publication.

### **Section 5.17 - Absorbent/Anti-Slip compounds**

Not approved under the AQIS system

### **Section 5.18 - Paints or other resinous or polymeric coatings**

Not approved under the AQIS system.

### **Section 5.19 - Solvents**

Not approved under the AQIS system.