



REGISTRATION OF AGRICULTURAL REMEDIES

NP MKULA DAFF AGRICULTURAL INPUTS CONTROL ACT NO. 36 OF 1947





Definition Of An Agricultural Remedy

•Any chemical substance or biological remedy, or any mixture or combinations of any substance intended to be used for:

•The destruction, control, repelling, attraction or prevention of any undesired microbe, algae, nematodes, fungus, insect, plant, vertebrate, invertebrate, or any product thereof, but excluding any chemical substances, biological remedy or other remedy in so far as it is controlled under the Medicine and Related Substances Control Act or Hazardous Substances Act;

•As plant growth regulator, defoliant, desiccant or legume inoculant,

•And anything else which the Minister has by notice in the Gazette declared an agricultural remedy for the purposes of this Act.



DAFF ROLE IN PESTICIDE REGULATION

- The DAFF has the responsibility to ensure that pesticides registered in South Africa are:
 - Safe to the host, user, consumer and the environment
 - Efficacious
 - Properly labelled
 - Do not negatively affect trade





WHY DO WE REGISTER AGRICULTURAL REMEDIES/PESTICIDES

- Section 3: 2 (a) of Act 36 of 1947,
- Agricultural remedy in respect of which registration is applied for should be suitable and sufficiently effective for the purposes of which it is applied for.
- Complies with prescribed requirements.
- It should not be contrary to the public interest.
- The establishment where it is manufactured must be suitable.



HOW TO COMPLY WITH SECTION 3 OF THE LAW

>MAJOR DATA SETS

Chemistry data
Biological data (efficacy/residues)
Tox data requirements for new ai/new formulations (OECD guidelines must be followed)

Development of labels and safety data sheet (MSDS)



LABELLING OF CHEMICALS (RISK MANAGEMENT)

➤ Labels

- Registration number L No
- Active ingredient(s) contents
- Manufacturer details
- Precautions/Warning statements
- Directions for use etc

PESTICIDE PICTOGRAMS AND COLOR BANDS – RISK COMMUNICATION

LABEL

Reg No LXXXX Wet/Act 36/1947

A wettable powder contact and stomach insecticide for the control of certain species of insects and mites (as listed) on citrus, deciduous fruit, cotton, potatoes and olives. 'n Benatbare poeier kontak- en maaginsekdoder vir die beheer van sekere insek- en mytplae (soos aangedui) op sitrus, sagtevrugte, katoen, aartappels en olywe.

AKTIEWE BESTANDDEEL / ACTIVE INGREDIENT

| XXXX | |
|-------------------|---------------------|
| (organophosphate) | (organofosfaat) |
| Net Mass | Netto Massa |

| Batch | Nun | nber | | - | | - | - | | |
|-------|-----|------|--|---|--|---|---|--|--|
| | | | | | | | | | |

..... Lotnommer

Date of Manufacture

.....Vervaardigingsdatum

UN NUMBER: XXX 24 Hour Emergency Tel No: XXX XXXX Information Hotline Tel No: XXXX XXXXX



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MATERIAL SAFETY DATA SHEET (RISK MANAGEMENT)

| Manufacture contact information | Physical and chemical properties |
|--|----------------------------------|
| Composition information on active ingredients | Stability and reaction |
| Hazard identification | Toxicological information |
| First aid measures | Ecological information |
| Fire fighting measures | Disposal |
| Accidental release | Transport information |
| Handling and storage | Regulatory information |
| Exposure control/personal protection | Other information |



EXPOSURE ROUTES TO PESTICIDES

- > Oral (food or water) = Food safety
- Inhalation = User
- Dermal = User
- > Other (eye or injection) = User
 - Environmental impact



WHO CLASSIFICATION SYSTEM (RISK MANAGEMENT)

> WHO TOXICITY CLASS (LD50 for rats (mg/kg b.w)

| Class | Oral Solid | Oral Liquid | Dermal Solids | Dermal Liquid |
|-------|------------|-------------|------------------|------------------|
| la | ≤ 5 | ≤ 20 | ≤ 10 | ≤ 40 |
| lb | 5 - 50 | 20 - 200 | 10 - 100 | 40 - 400 |
| II | 50 - 500 | 200 - 2000 | 100 - 1000 | 400 - 4000 |
| III | ≥ 501 | ≥ 2001 | ≥ 1001 | ≥ 4001 |
| IV | ≥ 2000 | ≥ 3000 | - | - |



TOXICITY EFFECTS

- Cancer
- Reproductive toxicity (fertility and development)
- Central nervous system damage
- Chronic respiratory disease
- Asthma
- Allergy etc



TOXICITY OCCURRENCE AND REACTION PATHWAY

- Exposure
- Clinical symptoms
- Medical treatment
- Recovery
- Death



Maximum Residue Limit (MRL) Setting Process

- DAFF proposes the MRL to DoH based on residue data submitted by the applicant.
- > DoH uses toxicological evaluation values (ADI and ARfD).
- Estimation of consumer intake.
- MRL is then set when ADI/ARfD is not exceeded.
- The MRL proposed/published should not pose any risk to the consumers.





Thank You