



*Hydrogen cyanamide – A
collective responsibility*

Schalk Reynolds | Philagro



PHILAGRO



Hydrogen Cyanamide “A Collective Responsibility”

Presented by Schalk Reynolds



PRODUCTS THAT WORK FROM PEOPLE WHO CARE

Background

Imagine farming with medium to high - chill apple varieties in Elgin / Langkloof without Dormex® & climate change...



Background

- Women on farms project (WFP) : a self – described feminist NGO organisation
- In 2025 Philagro received a memorandum from WFP on behalf of AlzChem, Germany (manufacturer of Dormex®)
- The protest actions of WFP in South Africa and Germany are supported by Pesticide Action Network Germany, INKOTA Network and the Association of Ethical Shareholders Germany
- Currently, there is no alternative rest breaking product available that is comparable to Hydrogen Cyanamide
 - On apples, pears and plums there are alternative products e.g. mineral oil and synthetic cytokinins
 - No alternatives for cherries, kiwi's, table grapes and wine grapes
- **A collective responsibility...**

**ALZCHEM:
STOP
PRODUCING
DEADLY
DORMEX!**

Memorandum from WFP to AlzChem

Allegations:

- Dormex® (Hydrogen Cyanamide) is a HHP (highly hazardous product)....
- Dormex® is banned in the EU but still used in South Africa....
- Non-compliance by farmers with the occupational health and safety legislation and a persistent lack of effective enforcement by labour inspectors.....
- Women working on farms are exposed to Dormex® without proper training, no proper protective clothing, no guaranteed water to wash their hands or toilets while working.....

Demanding:

- AlzChem immediately stop the production of Dormex® and export of a product that is listed under the 67 actives banned in the EU but still being used in other countries
- Philagro to stop the distribution of Dormex® in South Africa

Collaboration with various industry bodies...Philagro decided to meet with WFP

- CropLife, Hortgro, SATI, Agri Western Cape, Agbiz, Vinpro, SA wines and other



Definition of a HHP (highly hazardous product)

Regulations relating to agricultural remedies of 25 August 2023

- Introduced “substances of concern” and “restricted agricultural remedies”, which collectively include all criteria listed under the definition of an HHP.
- Agricultural remedies classified as “**substances of concern**” (criteria 2, 3, 4, 5 and 7 under the definition of an HHP).
- Agricultural remedies classified as “**restricted agricultural remedies**” (criteria 1, 6 and 8 under the definition of an HHP) will be restricted for sale and use by registered pest control operators only.

Criteria for an HHP (set by the Joint Meeting on Pesticides Management - international expert group that advises FAO and WHO) – **Hydrogen Cyanamide does not meet this criteria**

1. Pesticide formulations that meet the criteria of classes Ia or Ib of the WHO Recommended Classification of Pesticides by Hazard; or
2. Pesticide active ingredients and their formulations that meet the criteria of carcinogenicity Categories 1A and 1B of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS); or
3. Pesticide active ingredients and their formulations that meet the criteria of mutagenicity Categories 1A and 1B of the GHS; or
4. Pesticide active ingredients and their formulations that meet the criteria of reproductive toxicity Categories 1A and 1B of the GHS; or
5. Pesticide active ingredients listed by the Stockholm Convention in its Annexes A and B, and those meeting all the criteria in paragraph 1 of Annex D of the Convention; or
6. Pesticide active ingredients and formulations listed by the Rotterdam Convention in its Annex III; or
7. Pesticides listed under the Montreal Protocol; or
8. Pesticide active ingredients and formulations that have shown a high incidence of severe or irreversible adverse effects on human health or the environment.

- In plants Dormex[®] breaks down completely within 2-4 days into CO₂ and ammonia
- In soil Dormex[®] degrades completely into nitrate within approximately 4 days
- In water Dormex[®] is completely degraded via urea within 5-10 days

EUROPEAN UNION Situation

- In Northern Europe, the use of Dormex® does not play a significant role, because most fruit growing regions have **sufficiently cold winters**.
- There has only been a need for dormancy breakers in 5 countries in Southern Europe: **Portugal, Spain, France, Italy and Greece**.
- This demand is now being met in **Greece, Portugal and Italy** via **emergency authorizations**. In other words, Dormex® is also used in Europe because of its importance for farmers.
- In **Spain and Italy**, there are news in the press about the illegal traffic of Hydrogen Cyanamide (and many other PPP) For example this was published recently in the Italian press. 40 tons of illegal Hydrogen Cyanamide from China were apprehended by the police in the port of Bari (Italy):
<https://www.baritoday.it/cronaca/sequestro-fertilizzanti-illegali-porto-bari.html>



Registration support

Keeping the registrations in all these countries AlzChem has invested a significant amount of money to support Dormex® registrations in Europe and other countries over many years and is continuing in Europe with the following:

- Tox. Studies
- Operator studies
- Bystander studies
- Intensive Lobby work in Brussels and in countries outside the EU

Importance of Hydrogen Cyanamide to the Deciduous fruit industry

“If Hydrogen Cyanamide was to be banned in South Africa, deciduous fruit production in several regions would become unviable. Even where less effective alternatives could be used, yields and profitability would be significantly compromised. This would severely affect areas such as EGVV and the Langkloof, which produce 62% (15,524 ha) of the country’s apple crop. The value of apple production in these regions is approximately R7 billion, supporting around 20,000 on-farm jobs and about 80,000 dependents, excluding additional employment within the broader value chain (e.g., packhouses and agricultural suppliers)”.

“As a vital component in table grape production, Hydrogen Cyanamide supports synchronized budbreak and flowering, facilitating uniform development of berries. Without Hydrogen Cyanamide it would not be possible to farm sustainable with table grapes, especially the Northern Cape and Mpumalanga regions. The industry supports approximately 105,000 direct employment opportunities to the value of R 3.83 billion per annum”



GLOBAL GAP/EURO GAP standards for export qualification

- ✓ Health/safety risk assessments and procedures.
- ✓ Training records on safety (e.g. chemical handling)
- ✓ PPE provided
- ✓ Emergency plans displayed
- ✓ Suitable housing/accommodation provided
- ✓ Access to clean water, sanitation and canteens
- ✓ Traceability
- ✓ Includes vineyard hazards like pesticides
- ✓ Upon appointment, medical testing is done. This is followed by regular medical testing (e.g. blood, eyes) to monitor risks
- ✓ Annual training is required
- ✓ A representative sample of worker interview records must be kept for at least 12 months. Records must be kept confidential
- ✓ Non-conformance must be addressed promptly

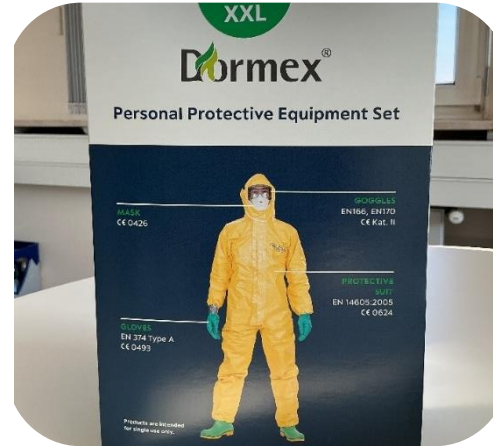
CropLife SA Key Activities on Responsible Use

- Responsible Use “Train the Trainer” Initiative
 - **Topics** covered:
 - Importance of labels (WHO vs GHS formats) – emphasis on label instructions in terms of Act No. 36 of 1947 – legal documents; safe storage and stock management at the end user level; principles of Integrated Pest Management (IPM) – as applicable; safe handling, measuring, mixing and application – emphasis placed on label warnings/precautions/instructions and PPE; post handling and application safety principles – emphasis placed on recycling empty pesticide packaging; the management of obsolete stock; exposure to crop protection products – what to do in such situations.
 - 2023: CropLife SA and CropLife SA members = Approximately 5700 individuals.
 - 2024: CropLife SA = App 1650 farmworkers.
 - So far in 2025 CropLife SA = App 300 individuals trained, with a further 1800 farmworkers planned for the remaining events.



Product Stewardship – On farm training of spray operators

**820 Spray
operators
trained on
83 farms in
2025**



Next steps

- The Registrar, Act 36 of 1947 requested that all registration holders of Hydrogen Cyanamide to submit the latest research, including studies done on worker exposer and proposals to reduce the risk to worker exposer (including label changes).
 - Philagro proposed to add a buffer zone of 8 m to the label and the removal of handgun applications.
- The Registrar also requested a summary of Dormex® application methods in other major fruit producing countries like North America, South America, Australia, New Zealand, Morocco, Egypt, India and China.
 - Dormex® is applied within a closed environment (cab tractors) in North America. However, this will not work on table grapes farms due to the trellis systems used.
- The Registrar is under immense pressure to make a decision....awaiting feedback

Conclusion



- The current situation is like a World Cup Final...the industry cannot afford a **red card** !
- It is a collective responsibility....ours
 - Manufacturers, Distributors, Crop Advisors, Growers, Spray operators and Farm workers
 - We all need to work together to ensure safe and responsible use of Hydrogen Cyanamide (and other Agricultural remedies) until we found an alternative rest breaking product.

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THANK YOU

Products that work from people who care
www.philagro.co.za

Acknowledgements:

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- Other

