



## Understanding the GHS

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South Africa is now using the international system for classifying and labeling chemicals, the GHS (The **G**lobally **H**armonized **S**ystem of Classification and Labelling of Chemicals) (Cutting Edge No. 354).

This system is beneficial for many reasons, but chiefly allows for consistency and transparency as well as protection to human health and the environment.

The Department of Employment and Labour amended the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993). According to Gazette No. 46299 all chemicals manufactured before 30 September 2022 have until **30 September 2023** to become GHS compliant. Chemicals manufactured after 30 September 2022 must **already** be compliant.

Act 36/1947 label changes must be approved by the Registrar of the act. Registration holders are in the process of updating their labels and SDS's, however, there is a delay at the Registrar's office. Industry can expect delays with some Act 36/1947 GHS label changes.

With the GHS, each of the ingredients (not just the active) needs to be considered. Generic products may have different components, so products with the same active ingredient may have different classifications.

What are the main changes?

- All hazardous ingredients (not just the active) need to be listed. Hazardous co-formulants may be indicated with a concentration range.
- The WHO colour-coded band (based on acute oral and dermal toxicity) with precautionary pictograms, has been replaced with **standardised GHS red-diamond symbols**.

[http://www.chemsafetypro.com/Topics/GHS/Download\\_GHS\\_Pictogram\\_Posters.pptx](http://www.chemsafetypro.com/Topics/GHS/Download_GHS_Pictogram_Posters.pptx)

- GHS considers three hazard classes: Health, Physical and Environmental. A signal word (Danger or Warning) is assigned to the label based on the classification to indicate the relative level of severity and to alert the user of the potential hazards.
- Allergies (sensitisers) are also considered.
- First aid instructions will be on the GHS label.

Practicalities for producers and packhouses:

- **Handling** (prevention precautionary statements P200's): the new classification may require a change in how some products are handled.
- **Laundry** (statement P272): some PPE may not be allowed to be taken home by the employee for washing, instead laundry must be done on site.
- **Storage** (precautionary statements P400's): the new classification may require a change in how some products are stored. Some products that were previously stored in the open may now need to be placed in a locked area (P405). This has an implication for audits.
- Products that are classified as carcinogens (C), mutagens (M) or reproductive (R) toxins 1a (known CMR) and 1b (presumed CMR) will be phased out, or new formulations conditionally registered, by 1<sup>st</sup> June 2024.
- SDS and label databases that are kept for audits must be updated.



## GHS PICTOGRAMS



Oxidizing agents



Flammable substances  
Self reactive substances  
Pyrophoric substances  
Self heating substances  
Substances emit flammable gases  
Organic peroxides



Explosives  
Self reactive substances  
Organic peroxides



Acutely toxic  
(severe)



Burns skin  
Damages eyes  
Corrosive to metals



Gases under pressure



Carcinogen  
Respiratory sensitizer  
Reproductive toxicity  
Target organ toxicity  
Mutagenicity  
Aspiration toxicity



Toxic to aquatic  
environment



Acutely toxic (harmful)  
Irritant to skin, eyes or  
respiratory tract  
Skin sensitizer  
Hazardous to the Ozone  
layer

Acknowledgment: CropLife South Africa

## GHS PIKTOGRAMME



Oksideermiddels



Vlambare stowwe  
Selfreagerende stowwe  
Selfontbrandende stowwe  
Self-verhittende stowwe  
Stowwe stel vlambare gasse vry,  
Organiese peroksiede



Springstowwe  
Selfreagerende stowwe  
Organiese peroksiede



Akute giftigheid  
(ernstig)



Brand vel  
Beskadig oë  
Invretend op metale



Gasse onder druk



Kankerwekkend  
Inaseming sensitisering  
Voortplantingsgiftigheid  
Spesifieke teikenorgaan giftigheid  
Mutagenisiteit  
Inasemingsgiftigheid



Giftig vir  
wateromgewing



Akute giftigheid (skadelik)  
Irriteerder vir vel, oë of lugweg  
Vel sensitiseerder  
Gevaarlik vir die osoonlaag

Erkenning: CropLife Suid-Afrika



## Verstaan die GHS

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Suid-Afrika gebruik nou die internasionale stelsel vir die klassifikasie en etikettering van chemikalieë, die GHS (The **G**lobally **H**armonized **S**ystem of Classification and Labeling of Chemicals) (Snykant Nr. 354).

Hierdie stelsel is om baie redes voordelig, maar maak hoofsaaklik voorsiening vir konsekwentheid en deursigtigheid sowel as beskerming vir menslike gesondheid en die omgewing.

Die Departement van Indiensneming en Arbeid het die Wet op Beroepsgesondheid en -veiligheid, 1993 (Wet No. 85 van 1993) gewysig. Volgens Gazette No. 46299 het alle chemikalieë wat voor 30 September 2022 vervaardig is, tot **30 September 2023** om aan GHS te voldoen. Chemikalieë wat na 30 September 2022 vervaardig is, moet **reeds** voldoen.

Wet 36/1947 etiketveranderinge moet deur die Registrateur van dié wet goedgekeur word. Registrasiehouers is besig om hul etikette en SDS's op te dateer, maar daar is 'n vertraging by die Registrateur se kantoor. Die industrie kan vertraging verwag met sommige Wet 36/1947 GHS-etiketveranderinge.

Met die GHS moet elkeen van die bestanddele (nie net die aktiewes nie) oorweeg word. Generiese produkte kan verskillende komponente hê, dus produkte met dieselfde aktiewe bestanddeel kan verskillende klassifikasies hê.

Wat is die belangrikste veranderinge?

- Alle gevaarlike bestanddele (nie net die aktiewe nie) moet gelys word. Gevaarlike ko-formulante kan met 'n konsentrasiereeks aangedui word.
- Die WGO-kleurgekodeerde band (gebaseer op akute orale en dermale giftigheid) met voorsorg-piktogramme, is vervang met **gestandaardiseerde GHS rooi-diamant simbole**.

[http://www.chemsafetypro.com/Topics/GHS/Download\\_GHS\\_Pictogram\\_Poster.ppt](http://www.chemsafetypro.com/Topics/GHS/Download_GHS_Pictogram_Poster.ppt)

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- GHS het drie gevaarklasse: Gesondheid, Fisies en Omgewing. 'n Seinwoord (Gevaar of Waarskuwing) word op grond van die klassifikasie aan die etiket toegeken om die relatiewe vlak van erns aan te dui en om die gebruiker van die potensiele gevare te waarsku.
- Allergieë (sensitiseerders) word ook oorweeg.
- Noodhulp-instruksies sal op die GHS-etiket wees.

Praktiese implikasies vir produsente en pakhuis:

- **Hantering** (voorkomingsvoorsorgstellings P200's): die nuwe klassifikasie kan 'n verandering vereis in hoe sommige produkte hanteer word.
- **Wasgoed** (stelling P272): In sekere gevalle, moet werksklere op die perseel gewas word.
- **Berging** (voorsorgaanbevelings P400's): die nuwe klassifikasie mag dalk 'n verandering vereis in hoe sommige produkte gestoor word. Sommige produkte wat voorheen ongesluit geberg is, moet dalk nou in 'n geslote area geplaas word (P405). Dit hou implikasie in vir vir oudits.
- Produkte wat geklassifiseer word as kankerwekkend (C), mutagenisiteit (M) of voortplantingsgiftigheid (R) 1a (bevestigde CMR) en 1b (vermoedelike CMR) sal uitgefaseer word, of nuwe formulerings voorwaardelik geregistreer word, teen 1 Junie 2024.
- SDS en etiketdatabasisse wat vir oudits gehou word, moet bygewerk word.