

# DG and GHS Classification System

**UNEP / ICCA Workshop**

**TEMA**

**June 2014**

# DG and GHS Classification System

## Labels

All packages containing DG **must** display labels identifying the product hazard.

DG Class labels are **always** shown in diamond format.

Class labels should not be less than 100mm square, except for small packages.

# MUSCLE-UP®

## K 500 SL

K500 SL is a Registered trademark of Ag Chem Africa (Pty) Ltd Reg No 18885/01/30/11 of 1997



*Datura stramonium*



*Datura stramonium*



*Scilla pilosa*

### HRAC HERBICIDE GROUP CODE G

A water soluble concentrate non-selective, foliar applied systemic herbicide for the control of a wide range of annual and perennial weeds in agricultural, non-crop and industrial areas.

#### Active Ingredient

Glyphosate (glycine) 500 g/L  
(Potassium salt)



Registered, Manufactured and Distributed by:  
Ag Chem Africa (Pty) Ltd (Reg. No. 18885/01/11/05)  
P.O. Box 286, Everson, 1707, Grahamstown, SA  
Tel: 012 403 0145 • Fax: 012 403 0144  
www.agchem.co.za

Content • Batch number • Manufacture date

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CAUTION





**SHAKE WELL** Shake well before use • Store at room temperature  
**Keep out of direct sunlight** • Keep container closed when not in use



The product is a liquid mixture:

- Classified as a suspected reproductive toxicant, classification 6.8B and as flammable liquid, classification 3.1C
- Has a UN RTDG classification of "flammable liquid, UN 1263"

**Label for a Small Workplace Container (10 Litres)**

<b>ZZZ Red Paint</b>	
UN1263 FLAMMABLE LIQUID, PAINT	ERMANZ Register Approval Number: XXXX
	
<b>CHRONIC TOXIC</b>	<b>FLAMMABLE LIQUID</b>
<b>WARNING</b>	
Suspected of damaging fertility or the unborn child Flammable liquid and vapour Contains lead pigments (3.5%) and cellosolve acetate (30%)	
Keep away from all sources of ignition and keep container tightly closed Keep away from food and drink	
Avoid contact with skin and eyes and inhalation of the vapour Do not handle until precautions on this label and in Safety Data Sheet have been read and understood	
<b>Prevention Measures:</b> Use explosion-proof electrical equipment and non-sparking tools, and take precautions against static discharge when working with this product. In case of fire use CO <sub>2</sub> , dry chemical or foam extinguisher.	
<b>Protective clothing:</b> Wear rubber gloves and safety glasses when using this product	
<b>First aid:</b> If exposed to this product get medical attention. If on skin remove contaminated clothing and rinse skin with water.	
<b>Storage:</b> Store locked up, in a well-ventilated place and keep containers cool.	
<b>Disposal:</b> Do not allow this product to enter drains or waterways Dispose of this material and its container as hazardous waste	
<b>PFH Paint Manufacturing Company, 123 Sunshine Place, Christchurch New Zealand</b> <b>Ph (03) 789 1234</b>	



**HAZARD**  
KEEP OUT OF REACH OF CHILDREN  
PLEASE READ THE LABEL COMPLETELY BEFORE USE

# GRAMOXONE® 250

## HERBICIDE

Active Ingredient: GRAMOXONE 250 contains 250 g/litre PARAQUAT as the dichloride salt. In the form of a soluble concentrate.

For weed control in: Clover seed crops, Drains, Forestry, Industrial sites, Lawns, Swards, Waterways and the control of Barley grass.

Net Contents: 5 and 20 litres

Registered pursuant to the ACVM Act 1997, No. P110.  
See [www.nzta.govt.nz/acvm/](http://www.nzta.govt.nz/acvm/) for registration conditions

Approved pursuant to the HSN Act 1996, Approval Code HSN000028.

Syngenta Crop Protection Limited  
Tower 2, Level 7, 150 Symonds Street, Auckland

UN-3016 BIPYRIDILIJM PESTICIDE, LIQUID, TOXIC, N.O.S. (Contains paraquat 25%) PACKING GROUP III, HAZCHEM 2X CONTAIN SPILLAGE

In a hazard emergency dial 111, Police or Fire Brigade. For specialist advice in an emergency only, call 0800 764 766 (24 hours)

**This product MUST NOT be used for any purpose or in any manner contrary to the controls and conditions of this registration.**

**This product MUST be Tracked and controlled by an Approved Handler.**



HSNO Classifications 6.1A, 6.3A, 6.4A, 6.5A, 9.1A, 9.3B, 9.4B

### DANGER

Fatal if swallowed, inhaled or if absorbed through the skin

May cause eye irritation.

May cause skin irritation.

May cause organ damage from repeated oral exposure at high doses.

Very toxic to aquatic organisms.

Toxic to terrestrial vertebrates.

Toxic to terrestrial invertebrates.

### PRECAUTIONS

Store in original container, tightly closed, away from foodstuffs and under lock and key.

Avoid contact with seeds, fertilisers and other pesticides.

DO NOT use GRAMOXONE 250 in a mistblower.

When handling the concentrate wear full protective clothing such as overalls, gloves and face shield.

Wash splashes of concentrate from skin or eyes immediately.

When spraying, wear overalls and gloves.

Avoid contact with skin, eyes and inhalation of spray mist.

DO NOT eat, drink or smoke while using.

Wash hands and face before eating, drinking or smoking and after work.

Wash protective clothing after use.

Apply with well maintained and calibrated spray equipment.

Tracking records MUST be kept.

Application, storage and record keeping should be as described in the Management of Agrichemicals NZS8409.

DO NOT carry on a passenger service vehicle.

Avoid contamination of any water supply with chemical or empty container.

**Container disposal:** Ensure the container is empty. Triple rinse the container and add the residue to the spray tank. If recycling, replace cap and return clean containers to recycler or designated collection point.

Alternatively, if allowed under local Territorial Authority District Plans, burn if circumstances, especially wind direction permit, otherwise crush and bury in an approved local authority facility. DO NOT reuse this container for any other purpose.

**Product disposal:** Dispose of this product only by using according to the label, or at an approved landfill or other approved facility.

### SYMPTOMS OF POISONING

An early symptom of poisoning may be vomiting, although other symptoms include stomach pains, nausea and burning of the mouth. In the event of any of the above symptoms the first aid treatment prescribed below must be followed in full.

### FIRST AID

If poisoning is suspected rush to an Accident and Emergency Department of the nearest hospital after alerting them by telephone. If swallowed, DO NOT induce vomiting. For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. If breathing has stopped, commence mouth to nose resuscitation (other than mouth to mouth). Use alternative respiratory or proper respiratory device. Wash splashes of concentrate from the skin immediately. Remove contaminated clothing and immediately wash affected areas of skin. DO NOT scrub the skin. If the concentrate is splashed in the eyes flush with running water for 15 minutes then get medical attention.

# DG and GHS Classification System

## Dangerous Goods Package Labels

**FOLIDOL M50 5 LITRE TRANSPORT LABEL**

**FOLIDOL® M50**

**TOXIC**  
6.1

**FLAMMABLE LIQUID**  
3

**MARINE POLLUTANT**

UN 3017  
 ORGANOPHOSPHORUS PESTICIDE, LIQUID,  
 TOXIC, FLAMMABLE, (50% PARATHION-METHYLXYLENE)  
 PACKING GROUP II HAZCHEM CODE 3 W E

**IN A TRANSPORT EMERGENCY**  
 DIAL 111  
 POLICE OR FIRE BRIGADE

Bayer New Zealand Limited  
 Emergency contact  
 0800 CHEMCALL or 0800 243622  
 New Zealand wide 24 hours

Code No. 6911976 2/99 - Jet Print

**MISCELLANEOUS DANGEROUS SUBSTANCES**  
9

UN 3082  
 ENVIRONMENTALLY HAZARDOUS  
 SUBSTANCE,  
 LIQUID, N.O.S (44.2% ethofumesate)

Packing Group III Hazchem Code 2X

**IN A TRANSPORT EMERGENCY**  
 DIAL 111  
 POLICE OR FIRE BRIGADE

Bayer New Zealand Limited Emergency Only  
 0800 737 607  
 New Zealand wide 24 hours

# DG and GHS Classification System

**Substances having two or more hazards above the DG Transport threshold are identified in UN DG List as:**

- **Primary Class or Division; and**
- **Subsidiary Risk.**

# DG and GHS Classification System

## Subsidiary Risk Labels

All class labels must display the Class number regardless if it is the Primary or Secondary risk.



Example:

UN No.1072 OXYGEN COMPRESSED  
Primary Risk 2.2 Subsidiary Risk 5.1



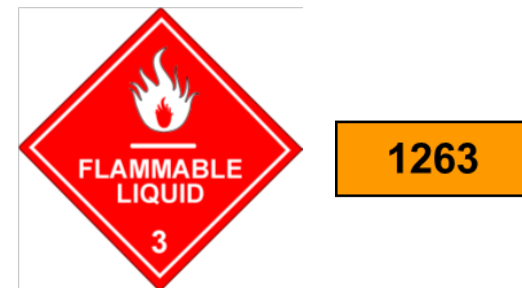
# DG and GHS Classification System

## Marking of Cargo Transport Units

Packaged DG exceeding 4,000 kg assigned one UN number **must** display the UN Number.



or



# DG and GHS Classification System

## Marine Pollutant Mark

Cargo Transport Units containing marine pollutants **must** clearly display the marine pollutant mark.



# DG and GHS Classification System

Ecotoxic mark **must** be displayed on all containers of Environmentally Hazardous substances UN Nos. 3077 and 3082.



or



UN Class 9 label must also be displayed



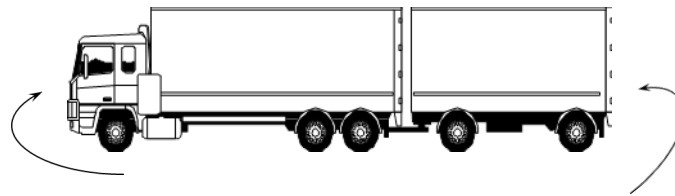
or



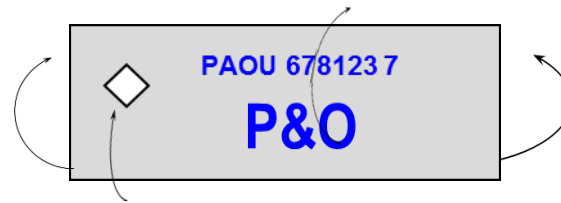


# DG and GHS Classification System

## Placard Placement on VEHICLES



**On CONTAINERS**



**On LAND – one each side, on diagonally opposite corners.**

**At SEA – one each end.**

# DG and GHS Classification System

## CHLORINE

**HAZCHEM**

**2XE**

**UN No.**

**1017**

**IN EMERGENCY**

**DIAL**

**AUST 000**

**NZ 111**

**FIRE BRIGADE**



**ORICA CHEMNET**  
**24 Hour Emergency**  
**Advice Freephone**  
**0800 734 607**

**Emergency  
Information  
Panel**

# DG and GHS Classification System

## Packaging Requirements

- All packaging containing chemicals **must** be fit for transport and storage.
- All packaging material **must not** be able to contaminate or react with the contents.

# DG and GHS Classification System

## Packaging

- **Bulk Containers.**

- **Cargo Transport Units.**

- **IBCs.**

- **Drums.**

- **Consumer Products.**



Chemical Drums



# DG and GHS Classification System

## Mandatory UN Certification Mark

**U**  
**N** 4G/X30/S/96/GB/8999

**U**  
**N** 1A1/Y1.6/250/96/USA/VL

**U**  
**N** UN symbol

**U**  
**N** UN symbol

**4** Box  
**G** Fibreboard  
  
**X** Suitable for PG I, II or III substances  
**30** Gross mass in kg  
**S** Solids or inner packages  
**96** Year of manufacture  
**GB** Country of certification  
**8999** Identification

**1** Drum  
**A** Steel  
**1** Type of Drum - fixed head  
**Y** Suitable for PG II or III substances  
**1.6** Relative density  
**250** Hydraulic test pressure  
**96** Year of manufacture  
**USA** Country of certification  
**VL** Identification



# DG and GHS Classification System

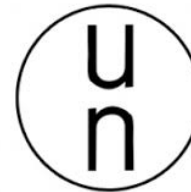
## UN Certification Mark Plastic Drum



# DG and GHS Classification System

## Packaging

- Type tested.
- Certified.
- Validity.
- UN Packaging Symbol.



- X Packing Group I, II and III
- Y Packing Group II and III
- Z Packing Group III



# DG and GHS Classification System

## Acceptance for Transport

All DG packages **must** have the following markings:

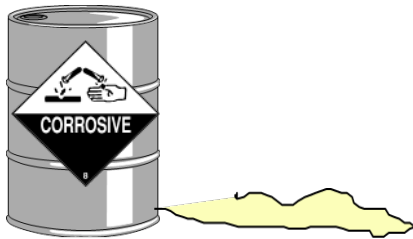
- ✓ Proper Shipping Name.
- ✓ Class (diamond label).
- ✓ UN Number.
- ✓ Marine Pollutant triangle (if required).
- ✓ UN Packing Symbol.
- ✓ Name of Manufacturer or Sender.
- ✓ Name of Receiver.

# DG and GHS Classification System

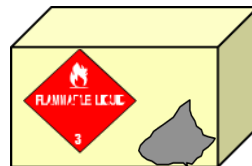
## Packaging

Some of the more obvious things to look out for:

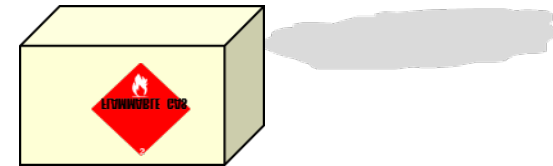
### 1. Leaks



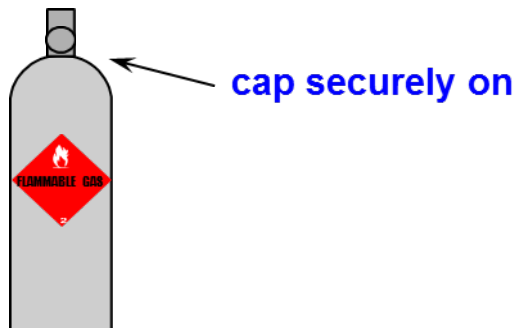
### 2. Dampness and/or stains



### 3. Fumes or smells



### 4. Protective caps on cylinders etc.



### 5. The outer package is strong enough, i.e. fit for purpose

- ✓ Glass products suitably protected.
- ✓ Drums and canisters have secure lids/fittings.
- ✓ Signs of rust, gouging, etc.
- ✓ Valid certification.

# DG and GHS Classification System

## Package Labelling

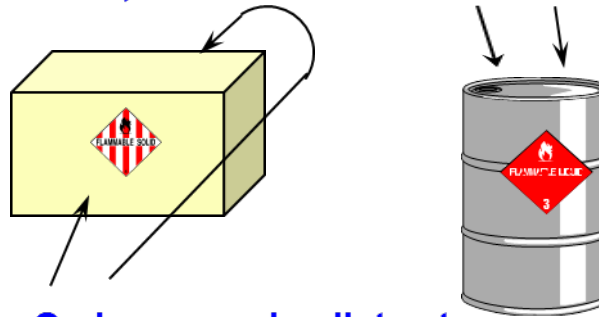
The three checks that **must** be made are:

### 1. Address



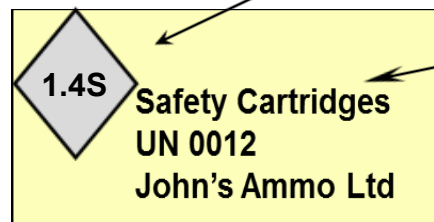
Addresses **MUST** show street address  
(NO Post Office Boxes)

### 2. Placement of Class Labels on drums, canisters etc **on one side and TOP**



On boxes and pallets etc  
**on opposite sides**

### 3. Product Identification



Class label, and subsidiary risk label if appropriate

- Proper shipping name or technical name
- UN No.
- Manufacturer's name

# DG and GHS Classification System

Is this  
consignment  
compliant?



# DG and GHS Classification System

## Compliant?



# DG and GHS Classification System

## Consignment Documentation

All DG must be accompanied by  
a DG Declaration highlighting  
Emergency Response  
information.



# DG and GHS Classification System

Tranz Link		The Interislander	
<b>Hazardous Substances/Dangerous Goods Declaration and Packing Declaration RFDG27</b>			
Proper shipping name	(a) EXTRACTS, FLAVOURING LIQUID (b) "DG LIMITED QUANTITIES" (c)	Class	(a) 3 (b) (c)
Common name	(a) Lemon Essence (b) (c)	Subsidiary risk	(a) (b) (c)
Number & kind of packages	(a) 24 x 2 litre Bottles in 2 cartons (b) (c)	Packaging group	(a) III (b) (c)
Gross weight (nett weight for explosives)	(a) 42 kg (b) (c)	Volume (cubic metres)	(a) m <sup>3</sup> (b) m <sup>3</sup> (c) m <sup>3</sup>
Additional information See note on writing shield		Flash point	(a) 52 C (b) (c)
Shipper/Consignor Name & Address Ace Food Preservatives 16 Turner Cres Upper Hutt		Phone	(04) 546 7778
Receiver/Consignee Name & Address Smith's Bakery Main St Temuka		Phone	(03) 332 4567
After hours emergency contact phone		Carrier	(021) 333 663
<p><b>Dangerous Goods Declaration</b> I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to the applicable international and national government regulations and legislation.</p>		Name	B. Good
		Title	Warehouse Mgr
		Company/Location	Upper Hutt
		Signature	<i>B Good</i>
		Date	23 Mar 02
<b>The section below is to be completed by the person packing the transport unit and/or the carrier</b>			
<input type="checkbox"/> Rail	<input type="checkbox"/> Road	<input type="checkbox"/> Sea	Container/Tank No. LUCO 1234567
Cargo Transport Unit Type of containment			Sailing Date
<input type="checkbox"/> Open <input checked="" type="checkbox"/> Closed			If sea Time
Position of dangerous goods in unit Mark with X			Wagon No. UK 1234
<input type="checkbox"/> Container Special conditions apply as contained in sec 12 of the IMDG Code <input type="checkbox"/> Tank Special conditions apply as contained in sec 13, 14, and 25 of the IMDG Code <input type="checkbox"/> IBC Special conditions apply as contained in sec 25 and 26 of the IMDG Code			
Railway wagon/container		Pantech / Artic / Truck and trailer	
XX Handbrake		C-0	
<p><b>Packing Declaration</b> I hereby declare that the goods have been loaded into the vehicle/container ID No. LUCO 1234567 in accordance with the provisions of section 12.3.7 or 17.7.7 of the general introduction to the IMDG Code.</p>		Name	T. Cruze
		Title	LFO TL Wgtn
		Company/Location	
		Signature	<i>T CRUZE</i>
		Date	25 / 3 / 02
See writing shield for notes and additional information For NZ Fire Brigade and Police Dial 111			
TL0006			



# DG and GHS Classification System



## DG Segregation

# DG and GHS Classification System

## Emergency Response



# DG and GHS Classification System

Tranz Link		The Interislander	
<b>Hazardous Substances/Dangerous Goods Declaration and Packing Declaration RFDG27</b>			
Proper shipping name	(a) EXTRACTS, FLAVOURING LIQUID (b) "DG LIMITED QUANTITIES" (c)	Class	(a) 3 (b) (c)
Common name	(a) Lemon Essence (b) (c)	Subsidiary risk	(a) (b) (c)
Number & kind of packages	(a) 24 x 2 litre Bottles in 2 cartons (b) (c)	Packaging group	(a) III (b) (c)
Gross weight (nett weight for explosives)	(a) 42 kg (b) (c)	Volume (cubic metres)	(a) (b) (c)
Additional information See note on writing shield		Flash point	(a) 52 C (b) (c)
Shipper/Consignor Name & Address Ace Food Preservatives 16 Turner Cres Upper Hutt		Phone	(04) 546 7778
Receiver/Consignee Name & Address Smith's Bakery Main St Temuka		Phone	(03) 332 4567
After hours emergency contact phone		Carrier	(021) 333 663
Dangerous Goods Declaration I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to the applicable international and national government regulations and legislation.		Name	B. Good
		Title	Warehouse Mgr
		Company/Location	Upper Hutt
		Signature	<i>B Good</i>
		Date	23 Mar 02
<b>The section below is to be completed by the person packing the transport unit and/or the carrier</b>			
<input type="checkbox"/> Rail	<input type="checkbox"/> Road	<input type="checkbox"/> Sea	Container/Tank No. LUCO 1234567
Cargo Transport Unit Type of containment			Sailing Date
<input type="checkbox"/> Open <input checked="" type="checkbox"/> Closed			If sea Time
Position of dangerous goods in unit Mark with X			Wagon No. UK 1234
Railway wagon/container			If rail
Handbrake			<input type="checkbox"/> Container Special conditions apply as contained in sec 12 of the IMDG Code
Pantech / Artic / Truck and trailer			<input type="checkbox"/> Tank Special conditions apply as contained in sec 13, 14, and 25 of the IMDG Code
Handbrake			<input type="checkbox"/> IBC Special conditions apply as contained in sec 25 and 26 of the IMDG Code
Packing Declaration I hereby declare that the goods have been loaded into the vehicle/container ID No. LUCO 1234567 in accordance with the provisions of section 12.3.7 or 17.7.7 of the general introduction to the IMDG Code.			Name
			Title
			Company/Location
			Signature
			Date
			T. Cruze
			LFO
			TL Wgtn
			7 CRUZ
			25 / 3 / 02
See writing shield for notes and additional information For NZ Fire Brigade and Police Dial 111			
TL0006			

# DG and GHS Classification System

## UNEP Awareness and Preparedness for Emergencies at Local Level (APELL)





# Managing a Chemical Emergency





SAA/SNZ HB 76:2010

Standards New Zealand Handbook

## Dangerous Goods – Initial Emergency Response Guide

Superseding SNZ HB 76:2008 and SAA HB 76:2004

SAA/SNZ HB 76:2010



# DG and GHS Classification System

## Improving Chemical Management

- ✓ **Implement best practice.**
- ✓ **Continuous Improvement.**
- ✓ **Role models.**



# DG and GHS Classification System

## Capacity Building

- **Legislation.**
- **Education.**
- **Training.**
- **Performance monitoring.**

# DG and GHS Classification System

**UNEP and ICCA chemical safety initiatives have common goals:**

- ✓ **Ethical commitment to protect people and our environment.**
- ✓ **Safe operational environments.**
- ✓ **Facilitate safe chemical management particularly in SMEs.**
- ✓ **Effectively manage chemical incidents.**
- ✓ **Monitor and report performance.**
- ✓ **Frank and timely communication with public.**

# DG and GHS Classification System

## Safe Chemical Management:

A 'banquet' from which you choose the healthy food you 'need', as well as 'like'!



# DG and GHS Classification System



- ✓ Provides proven, comprehensive, cost-effective chemical management system.
- ✓ Access to world-class advice.
- ✓ Assistance at government, industry and company level.
- ✓ Cost-effective solutions.
- ✓ Focus on SMEs.
- ✓ Continuous Improvement.
- ✓ Benchmark performance against 65 countries.





# DG and GHS Classification System



**Who is our next local success story?**

# DG and GHS Classification System

