



HAZCHEM

The volume of goods transported by road is ever increasing resulting in a significant increase in the variety of hazardous materials conveyed over the roads of South Africa. This, coupled with the ever-increasing volume of traffic on the roads, has led to an increase in the risk of accident or other incident involving such vehicles. Should an incident result in fire or in leakage of the product, there is a possibility of hazard to the public and the public Emergency Services (Traffic Department, Fire Brigade, police, etc) are likely to be called out to the incident. In order that emergency personnel can effectively and safely perform their functions at the scene of the incident, it is essential that they have the following information immediately available.

- a) Knowledge of what material is involved.
- b) Knowledge of the principal hazards presented by the material.
- c) Knowledge of what to do (and what not to do) to safely contain the hazard immediately on arrival.
- d) Knowledge of where to obtain further specialist advice and help once the initial phase of containment of the incident is complete.

The "Hazchem" system of placarding tankers conveying hazardous materials was originally devised in the UK to meet these needs and has been modified to meet South African conditions. The system became compulsory in July 1987.

The "Hazchem" system comprises two parts:

"Hazchem" placards for tankers.

"Hazchem" cards for the interpretation of the emergency notes on the labels.

A The "Hazchem" Placard

Each placard is divided into five parts as follows:

i) *The Hazchem Diamond*

The purpose of this part of the label is to advise the public and Emergency Services

of the nature of the primary hazard of the material being transported, **eg:** corrosive. The diamonds are used internationally for materials in transit, and use standard combinations of words, colour and picto-grams to set out such hazards and Corrosive

(black and white). Flammable (red), Toxic (white), Oxidising Agent



(yellow),
Compressed Gas (green), etc.

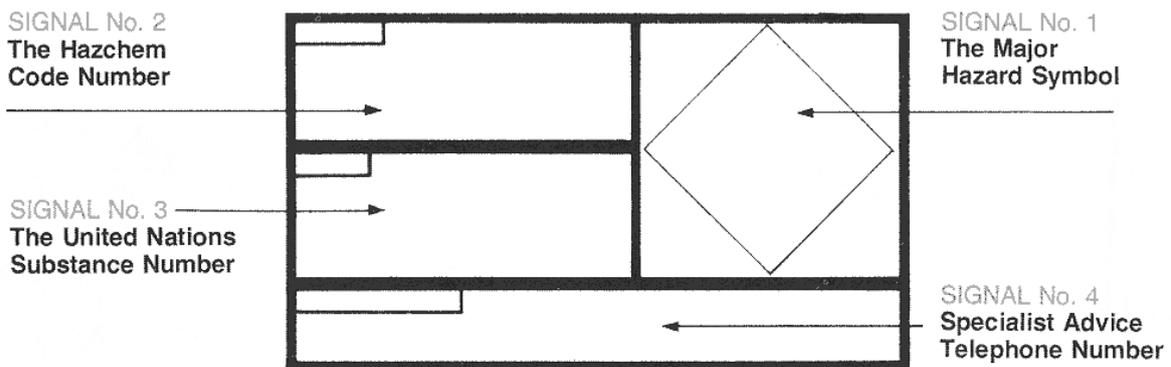


ii) *UN Number*

The purpose of this part of the placard is to provide a material identification that, so if emergency personnel have to request help from the manufacturer or supplier, they can accurately transmit details of the load. As many hazardous materials have complicated names which do not transmit well over telephone or radio voice links, the substance is identified on the "Hazchem" placard by its United Nations number, **eg:** 1830, an internationally accepted four digit identification peculiar to that material. It has been shown in tests that numbers transmit more accurately over telephone links than do chemical names.

To assist drivers, loaders and others who have to fill, unload, or label the tankers, the name of the material is also displayed in small print below the UN Identification Number.

Reference lists of UN Numbers with corresponding chemical names are kept by manufacturers and elsewhere, to provide easy translation of number to material name and vice versa.



iii) *The "Hazchem" code*

The purpose of the "Hazchem" code is to provide emergency Services with sufficient immediate information to enable them safely to contain the effects of the incident as soon as they arrive on the scene. The code is in the form of two or three numbers/letters which are interpreted by a pocket card carried by all emergency personnel, **eg:** 2P (See example illustrated).



The Hazchem Placard

The size, layout and colour of the placard remains the same. Differences occur with the hazard diamond and other information.

When multi-loads are transported the hazard diamond will display a large exclamation mark if different hazards are represented. Loads of common primary hazard will be indicated as such, **eg:** flammable, corrosive. The UN number will disappear in the case of multi-loads and will be replaced by the work "Multi-load".

The Hazchem code will be appropriate for any combination of products on the vehicle as these products must be compatible with one another.

Compartment Placard

An additional placard will be displayed on each compartment of a multi compartment vehicle indicating only the substance identification number (**eg:** 1930 for sulphuric acid) and the appropriate hazard diamond (**eg:** corrosive).

Hazchem Scale		Hazchem		Issue No 1
FOR FIRE OR SPILLAGE		UN No		
1		JETS		
2		FOG		
3		FOAM		
4		DRY AGENT		
P	v	FULL	DILUTE	
R		BA		
S	v	BA for FIRE only		
S		BA		
T		BA for FIRE only	CONTAIN	
T		BA		
W	v	FULL		
X		BA		
Y	v	BA for FIRE only		
Y		BA		
Z		BA for FIRE only		
Z		BA		
E	CONSIDER EVACUATION			

Notes for Guidance

FOG
In the absence of fog equipment a fine spray may be used.

DRY AGENT
Water **must not** be allowed to come into contact with the substance at risk.

V
Can be violently or even explosively reactive.

FULL
Full body protective clothing with BA.

BA
Breathing apparatus plus protective gloves.

DILUTE
May be washed to drain with large quantities of water.

CONTAIN
Prevent, by any means available, spillage from entering drains or water course.

Published by
Fire Protection Association of Southern Africa
(Incorporated Association not for Gain)
(Reg. No. 73/00022/08)
P O Box 15467
1472 Impala Park

