Hazardous Substances and Articles (Transportation by and Labelling of Road Tankers) Regulations, 1984

ARRANGEMENT OF SECTIONS

Section

IT is hereby notified that the Minister of Health has, in terms of section 47 of the Hazardous Substances and Articles Act [*Chapter 322*], made the following regulations:—

Title and date of operation

1. (1) These regulations may be cited as the Hazardous Substances and Articles (Transportation by, and Labelling of Road Tankers) Regulations, 1984.

(2) These regulations shall come into operation on the 1st January, 1985.

Interpretation

2. In these regulations—

"animal" means any domestic or wild animal, bird or fish but does not include vermin;

'compartment label" means a label prescribed in terms of section 6;

"certificate of fitness" means a certificate of fitness as defined in section 2 of the Road Motor Transportation Act [*Chapter 262*];

"emergency action code", in relation to a hazardous substance means—

(a) the code specified in column 3 of Part I of the First Schedule opposite to the name of the substance, or the code specified in terms of paragraph 3 of that Part; or

(b) in the case where the substance is also specified in column I of Part II of the First Schedule, the alternative code specified in column 3 of that Part opposite to the name of the substance;

"emergency procedure card" means a card clearly printed on it the procedure, prescribed by the operator, to be carried out in the event of a fire or spillage;

'exemption certificate" means an exemption certificate issued in terms of section 11;

"hazardous waste" means any waste which contains or may contain any Group II or Group III hazardous substance;

"hazard-warning panel" means a hazard-warning panel prescribed in terms of sections 4 and 6;

"hazard-warning sign" means a sign prescribed in terms of the Third Schedule;

'hazardous substance" means any substance specified in column I of Part I of the First Schedule or in terms of paragraph 3 of Part I of the same Schedule;

"inspecting officer" means an officer appointed in terms of section 71 of the Road Traffic Act, 1976;

"multi-load" means a load consisting of two or more hazardous substances in separate compartments or tanks whether or not a substance which is not a hazardous substance is being conveyed at the same time;

"multi-load emergency action code" means the emrgency action code ascertained in accordance with the Second Schedule;

"operator", in relation to any vahicle means—

(a) the person who holds or is required to hold a road service permit for that vehicle in terms of the Road Motor Transportation Act [*Chapter 262*]; or

(b) in any other case, the owner of that vehicle as defined in the Road Traffic Act, 1976;

"road" means a road as defined in the Road Traffic Act, 1976;

"road tanker" means a goods-vehicle having a tank with a capacity of 500 litres or more, whether the tank is temporary or permanently attached to the vehicle;

"secure area" means an area which is fenced, enclosed or protected;

"single load" means a load consisting of only one hazardous substance, whether or not a substance which is not a hazardous substance is being conveyed at the same time;

"substance identification number", in relation to a hazardous substance means—

(a) the number specified in column 2 of Part I of the First Schedule opposite to the name of the substance in column 1 of that Part, or the number specified in terms of paragraph 3 of the said Part I; or

(b) in the case where the substance is also specified in column I of Part II of the First Schedule, the alternative substance identification number specified opposite to the name of the substance in column 2 of the said Schedule;

"tank" means a tank which is used for the conveyance of a hazardous substance on a road tanker, but does not include a tank used solely for the operation of the vehicle as a means of transport.

Application

3. (1) These regulations shall apply in all cases relating to the conveyance by road of a hazardous substance where it is necessary to convey such hazardous substance by means of a road tanker, except—

(a) where the substance being conveyed is solely meant for the immediate operation of that vehicle as a means of transport; and

(b) where the road tanker is being used solely for conveying a hazardous substance from another road tanker which—

(i) has been damaged as a result of an accident occuring on a road; or

(ii) has broken down on a railway other than a siding on which it was loaded;

and the road tanker is being escorted by a vehicle used for police or fire service purposes; and

(c) where the road tanker is engaged in an international transport operation and complies in every respect with the requirements relating to vehicles of that type contained in any regulations in force in the country of origin of that tanker:

Provided that where the road tanker is entering Zimbabwe from a country which has no regulations similar to these regulations, then such tanker shall be labelled in accordance with these regulations.

(2) For the purposes of these regulations, a road tanker shall be deemed to be used for the conveyance, by road, of a hazardous substance throughout the period from the commencement of loading for the conveying of that substance until the tank or compartment used for that purpose has been cleansed or purged so that it is free from the substance and its vapour, whether or not it is on a road.

Particulars to be displayed on road tankers used for the conveyance of a single load

4. (1) Where a road tanker is being used for the conveyance of a single load, the operator of that road tanker shall ensure that it is provided with and displays hazard-warning panels in accordance with section 5, and such panels shall show the following particulars—

(a) the emergency action code for the substance which constitutes the load; and

(b) the substance identification number for that substance; and

(c) the appropriate hazard-warning sign; and

(d) the telephone number or other text approved by the Board indicating where specialist advice on the hazardous substance can be obtained at all times.

(2) The following additional information may be incorporated in a hazard warning panel

(a) the name (or one of the names), in terms of paragraph 3 of or as specified in column 1 of Part I of the First Schedule, of the hazardous substance which constitutes the load and, if that name is incorporated, the trade name of the substance; and

(b) the name of the manufacturer or owner of that substance or his company symbol, or both;

and, if so incorporated, such information shall comply with the provisions of the Fourth Schedule.

Composition, position, maintenance and removal of hazard-warning panels for single loads

5. (1) The hazard-warning panels required in terms of sub-section (1) of section 4 shall be three in number, one at the rear of the vehicle and one on either side of the vehicle.

(2) Each hazard-warning panel shall be—

(a) weather-resistant and indelibly marked, on one side only, in accordance with the specifications in paragraphs 1, 2 and 3 of Part I and in Part II of the Fourth Schedule; and

(b) either rigid or fixed or attached so as to become rigid; and

(c) in the case of a side panel, securely attached in a substantially vertical plane to the tank or to the vehicle either directly or by means of a suitable frame, with—

(i) its forward edge as close as is practicable to the front of the tank; and

(ii) its lower edge at least one metre from the ground; and

(d) in the case of a rear panel, securely attached—

(i) in a substantially vertical plane to the tank or to the vehicle either directly or by means of a suitable frame, or where the construction of the vehicle is such that this is not practicable, in some other manner so as to be clearly visible; and

(ii) with its lower edge at least one metre from the ground.

(3) Hazard-warning panels shall be kept clean and free from obstruction:

Provided that a rear panel may be mounted behind a ladder of light construction which does not prevent the information thereon from being easily read.

(4) Where a road tanker has had its tank emptied and cleaned or purged so as to be free from the hazardous substance including any vapour, the operator shall ensure, so far as is reasonably practicable, that the hazard-warning panels are either—

(a) completely removed; or

(b) partly covered or partly removed so as to leave visible only the telephone number or other text required by paragraph (d) of subsection (1) of section 4.

Particulars to be displayed on road tankers used for the conveyance of multi-loads

6. (1) Where a road tanker is being used for the conveyance of a multi-load in circumstances other than those mentioned in subsection (4), the operator of that road tanker shall ensure that it is provided with, and displays hazard-warning panels in accordance with section 7 and such panels shall show the following particulars—

(a) the appropriate multi-load emergency action code; and

(b) the word "multi-load"; and

(c) the appropriate hazard-warning sign; and

(d) the telephone number or other text approved by the Board indicating where specialist advice on the hazardous substances can be obtained at all times.

(2) The provisions of subsection (2) of section 4 relating to hazard-warning panels for a single load shall *mutatis mutandis*, apply to compartment labels prescribed in terms of subsection (3).

(3) In addition to the requirements of subsection (1), the operator shall ensure that each tank, or compartment of a tank, containing a hazardous substance is labelled with compartment labels in accordance with section 7 and those labels shall show the following particulars—

(a) the appropriate substance identification number; and

(b) where any other tank or compartment contains a hazardous substance of a different hazard, the appropriate hazard-warning sign.

(4) Where, by virtue of paragraph 4 of the Second Schedule, a road tanker is being treated as conveying a single load, this section and section 7 shall not apply, but sections 4 and 5 shall apply with the modification that the substance identification number and the emergency action code shall be ascertained from the said paragraph 4 of the Second Schedule.

Composition, position, maintenance and removal of hazard-warning panels and compartment labels for multi-loads

7. (1) The hazard-warning panels required in terms of subsection (1) of section 6 shall be three in number, one at the rear of the vehicle and one on either side of the vehicle and each such panel shall be—

(a) weather-resistant and indelibly marked, on one side only, in accordance with the specifications in paragraphs 1, 2, 4 and 5 of Part I and in Part II of the Fourth Schedule; and

(b) either rigid or fixed or attached so as to become rigid.

(2) Each side panels shall be securely attached to the tank or to the vehicle in a substantially vertical plane either directly or by means of a suitable frame with—

(a) its forward edge as close as is practicable to the front of the tanker, and, if there is more than one tank on the vehicle, to the front of the foremost tank; and

(b) its lower edge at least one metre from the ground.

(3) The rear panel shall be securely attached—

(a) to the tank or to the vehicle in a substantially vertical plane, either directly or by means of a suitable frame or, where the construction of the vehicle is such that this is not practicable, securely attached in such a manner as to be clearly visible; and

(b) with its lower edge at least one metre from the ground.

(4) The compartment lables required in terms of subsection (3) of section 6 shall be two in number, one on either side of the vehicle, and such labels shall be—

(a) weather-resistant and indelibly marked, on one side only, in accordance with the specifications in paragraphs 6, 7, 8 and 9 of Part I and in Part II of the Fourth Schedule; and

(b) either rigid or fixed or attached so as to become rigid.

(5) Each compartment label shall be securely attached to the tank or to the vehicle in a substantially vertical plane, either directly or by means of a suitable frame as close as is practicable to a position midway between the front and the rear of the compartment or tank.

(6) Hazard-warning panels and compartment labels shall be kept clean and free from obstruction:

Provided that a rear panel may be mounted behind a ladder of light construction which does not prevent the information theneon from being easily read.

(7) Where a road tanker —

(a) has had one or more of its compartments, or in the case of separate tanks, one or more of its tanks, emptied and cleaned or purged so as to be free from a hazardous substance including any vapour, the operator shall ensure, so far as is reasonably practicable, that the hazard-warning panels are either—

(i) completely covered or completely removed; or

(ii) partly covered or partly removed so as to leave visible, only the telephone number or other approved text as required by paragraph (d) of subsection (1) of section 6.

Duties of the consignor of a hazardous substance

8. The consignor of any hazardous substance or other person requiring such a substance to be conveyed by road shall—

(a) ensure that the operator has such information as is necessary to enable him to prepare the appropriate hazard-warning panels and compartment labels in accordance with these regulations; or

(b) supply the appropriate hazard-warning panels and compartment labels to the operator.

Duties of the operator of a road tanker

9. The operator of a road tanker which is to be used for the conveyance of a hazardous substance shall—

(a) where the emergency action code of the substance begins with the number "4", notify in advance all fire brigades on the proposed route and seek the advice of the Senior Fire Officer of the fire brigade of the area in which the road is situated as regards the route to be taken; and

(b) ensure that the driver is adequately instructed as to—

(i) the significance of the hazard-warning panels and compartment labels required to be displayed during conveyance; and

(ii) his duties under section 10;

and

(c) ensure that the road tanker is roadworthy and the driver thereof has its certificate of fitness, which certificate shall be carried in the vehicle at all times during transit; and

(d) ensure that details of instructions to the driver are displayed in the vehicle in accordance with the Fifth Schedule; and

(e) ensure that the driver has been handed the emergency procedure card.

Duties of the driver of a road tanker

10. The driver of a road tanker which is being used for the conveyance of a hazardous substance shall ensure that—

(a) all hazard-warning panels and compartment labels are displayed on the road tanker at all times when required by these regulations and that they are kept clean and, subject to the provisos to subsection (3) of section 5 and subsection (6) of section 7, free from obstruction; and

(b) he follows the route advised in terms of paragraph (a) of section 9; and

(c) he does not leave the vehicle unattended at any time except when parked in a secure area; and

(d) a certificate of fitness is in the vehicle; and

(e) he has been handed the emergency procedure card.

Exemption certificate

11. (1) Subject to the provisions of subsection (2), the Board may, by certificate in writing, exempt any person, class of persons, road tanker or class of road tankers from all or any of the requirements of these regulations in respect of any hazardous substance or class of hazardous substance:

Provided that any such exemption may—

(a) be granted subject to such conditions and to such a time limit as may be deemed appropriate; and

(b) be revoked at any time.

(2) The Board shall not grant any exemption in terms of subsection (1) unless it is satisfied that having regard to any conditions it may attach to the exemption and to any legal obligations which would also apply, the health and safety of persons who are likely to be affected by the exemption will not be prejudiced by it.

Enforcement

12. For the purposes of giving effect to powers conferred on him in terms of section 39 of the Act, any inspector may at any time—

(a) stop any road tanker on which a hazardous substance or article is being conveyed, or is suspected of being conveyed, in order to ascertain whether such a road tanker is being used in compliance with these regulations; and

(b) require any driver of any such road tanker to furnish his name and the name and the address of the owner of the road tanker or the consignor of any hazardous substance being conveyed in the road tanker.

Offences and penalties

13. Any person who—

(a) contravenes any of the provisions of these regulations; or

(b) causes a hazard to the health of any human being or animal by failing to exercise all reasonable care in the labelling and transportation of any substance specified in paragraph 3 of Part I of the First Schedule and in column I of Part I of the same Schedule;

shall be guilty of any offence and be liable to a fine not exceeding one thousand dollars or to imprisonment for a period not exceeding six months or to both such fine and such imprisonment.

FIRST SCHEDULE *(Sections 2 (1), 4 (2) and 6 (3))*

HAZARDOUS SUBSTANCES AND THEIR SUBSTANCE IDENTIFICATION NUMBERS, EMERGENCY ACTION CODES AND HAZARD-WARNING PANELS

PART I

1. "n.o.s." means not otherwise specified;
2. Column 3 shall be interpreted in accordance with Part III;
3. Any hazardous substance to be conveyed on a road tanker, the name of which does not appear in column 1 of Parts I and II shall be labelled in accordance with these regulations and use the emergency action code and substance identification number listed in the "UN Numbers—United Nations Substance Identification Numbers for the Transport of Dangerous Goods" and its companion volumes, which may be inspected, free of charge, at the office of the Secretary for Health.

COLUMN 1	*COLUMN 2*	*COLUMN 3*	*COLUMN 4*
Name of substance	*Substance identification number*	*Emergency action code*	*Hazard warning*
Acetic acid, glacial and over 90% by weight	1842	2P	Flammable liquid
Air, refrigerated liquid	1003	2P	Non-flammable compressed gas
Alcohol, denatured (Methylated spirit)	1095	2*S* E	Flammable liquid
Alcohol, industrial	1096	2*S* E	Flammable liquid
Ammonia, anhydrous, liquefied and ammonia solutions having a density (specific gravity) of less than 0,880 at 15°C in water, containing over 50% ammonia	1005	2PE	Toxic gas
Ammonia solutions having a density (specific gravity) of less than 0,880 at 15°C in water containing more than 35% and not above 50% ammonia	2073	2PE	Toxic gas
Benzene (Benzol)	1114	3WE	Flammable liquid
Butadiene, inhibited	1010	2WE	Flammable gas
Butylene (Butene)	1012	2WE	Flammable gas
Butane or butane mixture	1011	2WE	Flammable gas
Carbon dioxide (Carbonic anhydride) refrigerated liquid	2187	2XE	Non-flammable compressed gas
Caustic alkali liquids, n.o.s.	1719	2R	Corrosive substance
Cyanide solutions	1935	2X	Toxic substances
Decahydronaphthalene (decalin)	1147	3Z	Flammable liquid
n-Decane	2247	3Y	Flammable liquid
Ethanol (Ethyl alcohol)	1170	2SE	Flammable liquid
Gas oil	1202	3Z	Flammable liquid

COLUMN 1 *Name of substance*	*COLUMN 2* *substance identification number*	*COLUMN 3* *Emergency action code*	*COLUMN 4* *Hazard warning*
Hazardous waste, liquid containing acid	7006	2WE	Other hazardous substance
Hazardous waste, solid or sludge, containing acid	7007	2WE	Other hazardous substance
Hazardous waste, liquid	7008	2WE	Other hazardous substance
Hazardous waste, solid or sludge, containing alkali	7009	2WE	Other hazardous substance
Hazardous waste, flammable liquid, *flashpoint below 23°C*	7010	3WE	Other hazardous substance
Hazardous waste, flammable liquid, flashpoint 23°C to 60,5°C	7011	3W	Other hazardous substance
Hazardous waste, flammable solid or sludge, n.o.s.	7012	3WE	Other hazardous substance
Hazardous waste, solid or sludge, n.o.s.	7014	2X	Other hazardous substance
Hazardous waste, solid or liquid, n.o.s.	7015	2X	Other hazardous substance
Hazardous waste, solid or sludge, toxic, n.o.s.	7016	2X	Other hazardous substance
Hazardous waste, liquid toxic, n.o.s.	7017	2X	Other hazardous substance
Hazardous waste, liquid containing inorganic cyanides	7019	4X	Other hazardous substance
Hazardous waste, solid or sludge, agrochemical, toxic, n.o.s.	7020	4WE	Other hazardous substance
Hazardous waste, liquid, agrochemicals, toxic, n.o.s.	7021	4WE	Other hazardous substance
Hydrochloric acid in solution *(muriatic acid, spirits, of salts)*	1789	2R	Corrosive substance
Hydrocarbon gases and mixtures of such gases, liquefied, n.o.s.	1965	2WE	Flammable gas
Kerosene (Paraffin)	1223	3Y	Flammable liquid
Methanol (Methylalcohol, Wood alcohol, Columbian spirits)	1230	2PE	Flammable liquid
Naphtha (Coal tar, crude and solvent)	2553	2YE	Flammable liquid
Nitric acid, other than red fuming nitric acid	2031	2PE	Corrosive substance
Nitric acid, red fuming	2032	2PE	Corrosive substance
Nonane and its isomers	1920	2Y	Flammable liquid
Octane and its isomers	1262	3YE	Flammable liquid
Oxygen, refrigerated liquid	1073	2PE	Non-flammable compressed gas
Petrol	1203	3YE	Flammable liquid
Petroleum distillates, n.o.s. Benzene content less than 5% (see Note 1)*	1268	3YE	Flammable liquid
Petroleum fuel n.o.s. (see Note 2)*	1270	3YE	Flammable liquid
Petroleum gases, liquified	1073	2WE	Flammable liquid
Petroleum spirit, (Benzolene, Lythene, Petroleum ether)	1271	3YE	Flammable liquid
Propane	1978	2WE	Flammable gas

COLUMN 1	*COLUMN 2*	*COLUMN 3*	*COLUMN 4*
Name of substance	*Substance identification number*	*Emergency action code*	*Hazard warning*
Sodium hydroxide solution (caustic soda liquor, Sodium hydrate, lye)	1824	2R	Corrosive substance
Sulphuric acid	1830	2P	Corrosive substance
Sulphuric acid fuming	1831	4WE	Corrosive substance
Tars, liquid, including road asphalt and oils, bitumen and cut backs	1999	2W	Flammable liquid
Toluene (toluol)	1294	3YE	Flammable liquid
Turpentine substitute (white spirit)	1300	3Y	Flammable
Xylene (Xylol)	1307	3Y	Flammable liquid

Notes.—

(1)* Where benzene content is 5 *per centum* or more, use entry for benzene.

(2)* This substance does not include, butane mixtures, hydrocarbon gases and mixtures of such gases n.o.s. or propane.

PART II

ALTERNATIVE SUBSTANCE IDENTIFICATION NUMBERS AND EMERGENCY ACTION CODES FOR CERTAIN SUBSTANCES

Where any of the substances in column 1 below are being conveyed, the substance identification number and emergency action code set out opposite thereto in columns 2 and 3, respectively, may be used as an alternative to those shown in Part I.

COLUMN 1	*COLUMN 2*	*COLUMN 3*
Substance	*Alternative substance identification No.*	*Alternative emergency action code*
Turpentine substitute	1268	3YE
Gas oil	1270	3YE
Petrol	1270	3YE
Kerosene	1270	3Y

PART III

INTERPRETATION OF COLUMN 3 IN PARTS I AND II

1. The number in brackets indicates the equipment suitable for fire-fighting and where appropriate, for dispersing spillages as follows—

"1" water jets;

"2" water fog;

"3" foam;

"4" dry agent.

Notes.—

(1) In the absence of fog equipment, a fine spray of water may be used.

(2) Where dry agent is recommended, the use of water is hazardous.

2. The first letter indicates the appropriate precautions in the event of a fire or a spillage as indicated by the following table—

Letter	*Danger of violent reaction*	*Protective clothing and breathing apparatus*	*Appropriate measures*
P	Yes	Full protective clothing	Dilute
R	No	Full protective clothing	Dilute
S	Yes	Breathing apparatus	Dilute
S	Yes	Breathing apparatus for fire only	Dilute
T	No	Breathing apparatus	Dilute
T	No	Breathing apparatus for fire only	Dilute
W	Yes	Full protective clothing	Contain
X	No	Full protective clothing	Contain
Y	Yes	Breathing apparatus	Contain
Y	Yes	Breathing apparatus for fire only	Contain
Z	No	Breathing apparatus	Contain
Z	No	Breathing apparatus for fire only	Contain

Notes.—

(1) "Full protective clothing" includes breathing apparatus.

(2) Where "breathing apparatus" is indicated, protective gloves are also recommended.

(3) "Dilute" indicates that the substance may be washed to a drain with a large quantity of water.

(4) "Contain" indicates a need to avoid spillages from entering drains or water courses.

3. Where the letter "E" occurs at the end of the emergency action code, evacuation of people from the neighbourhood of an incident should be undertaken if the circumstances require.

SECOND SCHEDULE *(Sections 2 (1) and (6))*

THE MULTI-LOAD EMERGENCY ACTION CODE

1. The multi-load emergency action code shall consist of—

   (a) a number from "1" to "4"; followed by

   (b) a letter; followed, in certain cases, by

   (c) the letter "E".

2. For the purposes of item 3 below any of the letters "S", "T", "Y", and "Z" when shown in column 3 of Part I or Part II of the First Schedule as a black letter, the letter shall be treated as a different letter from an identical shown in that column as a white letter on a black background.

3. (1) The number of the multi-load emergency action code is the highest number of any occurring in the emergency action codes for each individual hazardous substance under paragraph 3 or as shown in column 3 of Part I or Part II of the First Schedule.

   (2) To determine the first letter of the multi-load emergency action code take the first letter of the emergency action code for each individual substance—

   (a) if it is the same letter on each case then that letter is the first letter of the multi-load emergency code;

   (b) if there are two different letters then take one of the letters and select the vertical column in the code chart in sub-item (3) below, which is headed (on the top horizontal line) by that letter, then take the other letter and select the horizontal line of letters which has that letter in the left hand vertical column, then the letter in the square where the first mentioned vertical column and that horizontal line meet ("the resultant letter") is the first letter of the multi-load action code;

   (c) if there are three different letters then take any two of them and proceed as in (b) above, then take the resultant letter and do the same again using the resultant letter and the letter for the third substance, then the letter in the square where the vertical column headed (on the top horizontal line) by the resultant letter and the horizontal line of letters which has the letter for the third substance in its left hand vertical column meet, is the first letter of the multi-load action code;

   (d) if there are more than three different letters, proceed as above taking the resultant letter each time with one of the other letters until all the other letters have been used, then the letter in the square when the last other letter is used is the first letter of the multi-load action code.

(3) The code chart is—

	P	R	S	*S*	T	*T*	W	X	Y	*Y*	Z	*Z*
P	P	P	P	P	P	P	W	W	W	W	W	W
R	P	R	P	P	R	R	W	X	W	W	X	X
S	P	P	S	S	S	S	W	W	Y	Y	Y	Y
S	P	P	S	*S*	S	*S*	W	W	Y	*Y*	Y	*Y*
T	P	R	S	S	T	T	W	X	Y	Y	Z	Z
T	P	R	S	*S*	T	*T*	W	X	Y	*Y*	Z	*Z*
W	W	W	W	W	W	W	W	W	W	W	W	W
X	W	X	W	W	X	X	W	X	W	W	X	X
Y	W	W	Y	Y	Y	Y	W	W	Y	Y	Y	Y
Y	W	W	Y	*Y*	Y	*Y*	W	W	Y	*Y*	Y	*Y*
Z	W	X	Y	Y	Z	Z	W	X	Y	Y	Z	Z
Z	W	X	Y	*Y*	Z	*Z*	W	X	Y	*Y*	Z	*Z*

(4) Nothing in this item shall be construed as authorizing the carrying of any two substances in one load if it would create a danger to mix them.

(5) The letter "E" shall be included as the last letter of the multi-load action code if it occurs in the emergency action code of any one of the substance in the multi-load.

4. Where a multi-load consists of the substances specified in sub-item (a) of column 1 below or two or more of the substances specified in sub-item (b) of that column then the load may be treated as if it were a single load with the substance identification number and emergency action code shown opposite thereto in column 2 and 3 respectively.

COLUMN 1	*COLUMN 2*	*COLUMN 3*
Substances which may be carried using the substance identification number and emergency action code shown in columns 2 and 3	*Substance identification number*	*Emergency action code*
(a) 1 300 turpentine substitute (White spirit) 1 268 petroleum distillates, n.o.s.* with a benzene content of less than 5%;	1268	3YE
(b) 1202 Gas oil 1203 Petrol 1223 Kerosene 1270 Petroleum fuel n.o.s.*	1270	3YE

*n.o.s. means not otherwise specified.

THIRD SCHEDULE *(Sections 2 (1), 4 and 6*

HAZARD-WARNING SIGNS

PART I

1. The hazard-warning signs that shall be used on hazard-warning panels and compartment labels are set out in Part II.

2. The hazard-warning sign to be displayed on a road tanker carrying a multi-load shall be the sign for "other hazardous substances and multi-loads of different hazards" unless the hazard as ascertained from column 4 of Part I of the First Schedule for each individual substance in the multi-load is the same, when it shall be the sign for that hazard.

3. Each hazard-warning panel shall be in the form of a square set with its sides at an angle of 45° to the vertical and the lenght of the sides shall be—

   (a) in the case of signs on hazard-warning panels, 200 millimetres or

   (b) in the case of signs on compartment labels 95 millimetres.

4. Signs for hazard-warning panels shall, for any part of the sign that is not black, have a black border at least 5 millimetres wide.

5. The signs shall conform in colour to the table below and such colours shall conform to the specifications given in Part II of the Fourth Schedule.

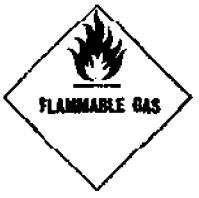
Description of sign	*Symbol*	*Lettering*	*Background*
Flammable liquids	Black	Black	Red
Flammable solids	Black	Black	White with vertical red stripes
Flammable gases	Black	Black	Red
Toxic gases	Black	Black	White
Non flammable compressed gases	Black	Black	Green
Toxic substances	Black	Black	White
Harmful substances	Black	—	White
Corrosive substances	Black	White	White upper half black lower half

Description	*Symbol*	*Lettering*	*Background*
Organic peroxides	Black	Black	Yellow
Oxidising substances	Black	Black	Yellow
Substances which in contact with water emit flammable gases	Black	Black	Blue
Spontaneously combustible substances	Black	Black	White upper half red lower half
Other hazardous substances and multi-loads of different hazards	Black	—	White

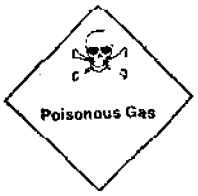
PART II

FLAMMABLE LIQUIDS

FLAMMABLE SOLIDS



FLAMMABLE GASES



TOXIC GASES

NON–FLAMMABLE COMPRESSED GASES

TOXIC SUBSTANCES

HARMFUL SUBSTANCES – KEEP AWAY FROM FOOD

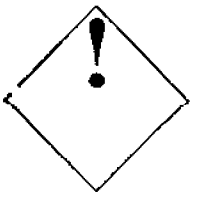
CORROSIVE SUBSTANCES

ORGANIC PEROXIDES

OXIDIZING SUBSTANCES

SUBSTANCES WHICH IN CONTACT WITH WATER EMIT FLAMMABLE GASES

SPONTANEOUSLY COMBUSTIBLE SUBSTANCES



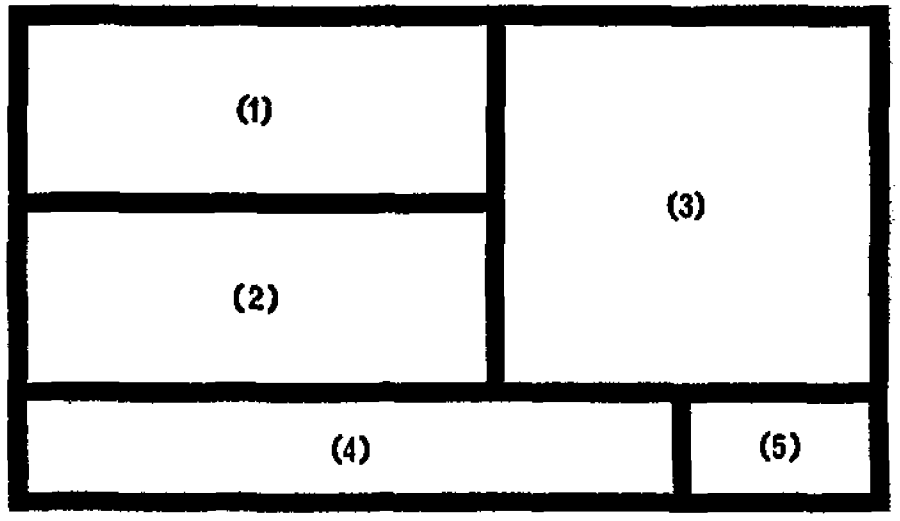
OTHER HAZARDOUS SUBSTANCES & MULTI-LOADS OF SUBSTANCES OF DIFFERENT HAZARDS

FOURTH SCHEDULE *(Sections 4, 5, 6 and 7)*

FORM AND SPECIFICATIONS OF *HAZARD-WARNING PANELS, HAZARD-WARNING* COMPARTMENT LABELS AND HAZARD-WARNING SIGNS

PART I

1. The form of the hazard warning panel is as set out below and the spaces shall be used for the purposes indicated by the notes below.



Notes.—

(1) Space for emergency action code.

(2) Space for substance identification number and if included, name or, in the case of multi-loads, the word "multi-load".

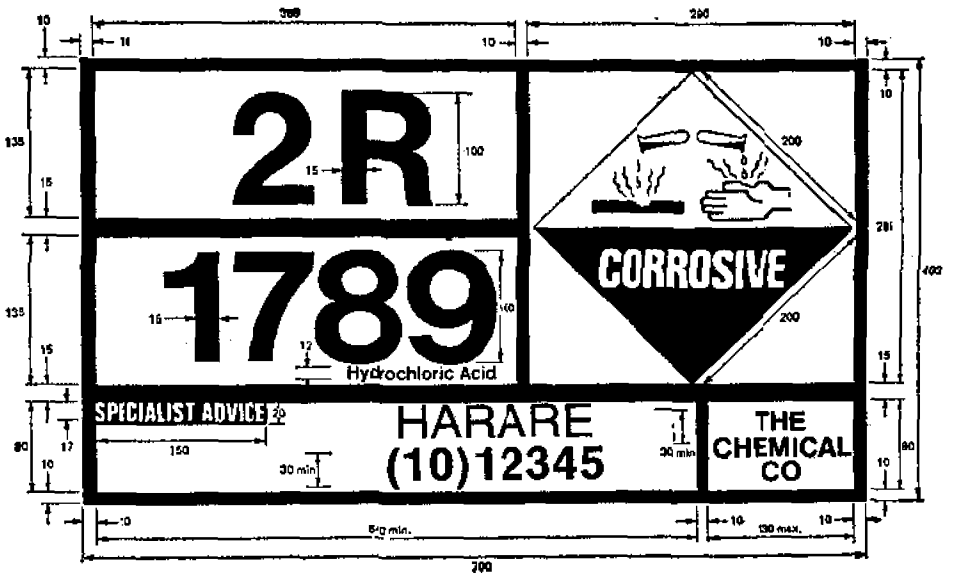
(3) Space for hazard-warning sign.

(4) Space for telephone number or other approved text.

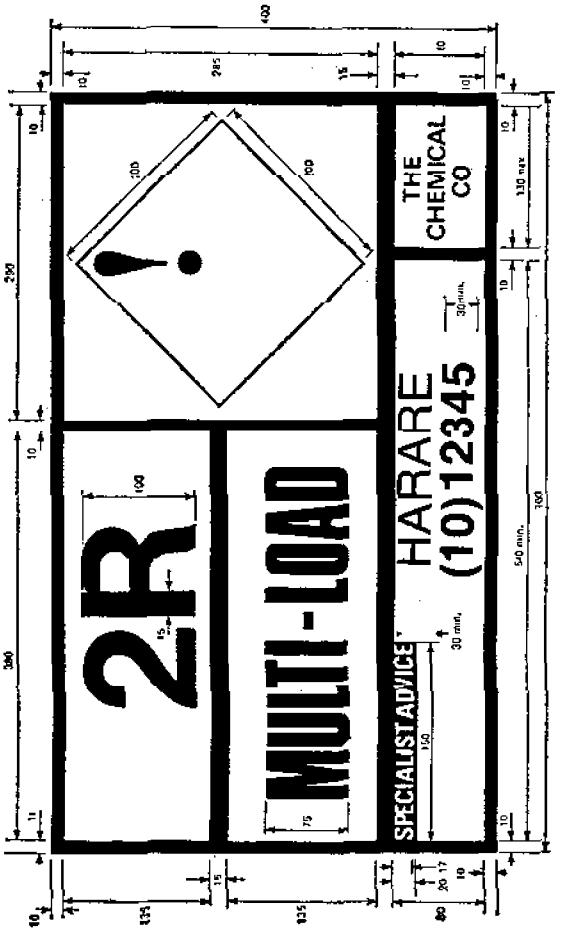
(5) Space for optional manufacturer's name or owner's name or company symbol, or both.

2. The colour of the hazard warning panel shall be orange and conform to the specification for that colour in Part II below, except for the space for the hazard-warning sign which shall be white, and the borders, internal dividing lines, letters and figures which shall be black.

3. The specification for hazard-warning panels for single loads is set out below with dimensions in millimetres.

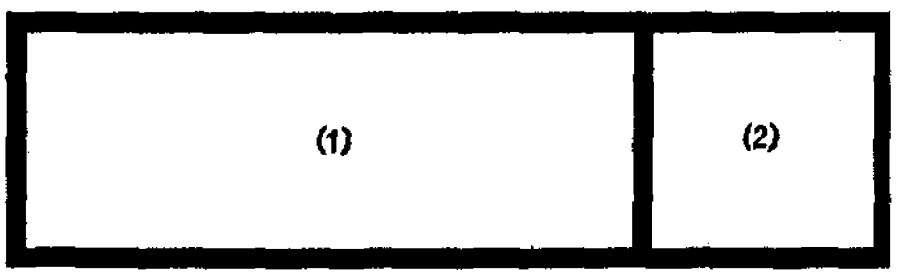


4. The specification for hazard-warning panels for multi-loads is set out below with the dimensions in millimetres.



5. Where the emergency action code or the multi-load emergency action code ascertained from either the First or the Second Schedule is a white letter on a black background it shall be displayed on the panel as orange on a black background; the letter shall appear in a black rectangle having a height of 110 millimetres and a width 10 millimetres greater than the width of the letter.

6. The form of the compartment label for multi-loads of substances of different hazards is set out below and the spaces shall be used for the purposes indicated by the notes that follow.



Notes.—

(1) Space for substance identification number and, if included, name.

(2) Space for hazard-warning sign.

7. Where the multi-load consists of substances of the same hazards the square labelled (2) on the diagram in item 6 above may be omitted from the compartment label.

8. The colour of the compartment label shall be orange and shall conform to the specification for that colour in Part II below except for the space for the hazard-warning sign, where one is required, which shall be white and the borders of which shall be black.

9. The specification for compartment labels is set out below with dimensions in millimetres.

PART II

The colours of the various parts of the panel, in conditions of normal use, shall have chromaticity co-ordinates lying within the area formed by joining on the Commission International de l'Eclairage chromaticity diagram (CIE 45. 15.200), the co-ordinates listed in the table below and for non-rectro reflective materials, the luminance factor B (CIE 45,60.425) shall be greater than or equal to that specified in the table for that colour. The tests shall be carried out using standard illuminant D65 (CIE 45.15.145).

Colour	*Chromaticity co-ordinates of corner points determining the permitted colour area illuminant:*					*Luminance factor B for non-rectro-reflective materials*
Red	x	0,658	0,576	0,605	0,690	0,07
	y	0,342	0,339	0,310	0,310	
Orange	x	0,520	0,520	0,578	0,618	0,22
	y	0,380	0,400	0,422	0,380	
Yellow	x	0,481	0,439	0,477	0,531	0,50
	y	0,518	0,471	0,433	0,468	
Green	x	0,007	0,248	0,286	0,201	0,15
	y	0,703	0,409	0,435	0,776	
Blue	x	0,078	0,198	0,240	0,137	0,05
	y	0,171	0,252	0,210	0,038	

Angle of illumination: 45° with the normal to the surface and viewed in the direction of the normal.

Note.—Typical permissible colours (gloss), under BS. 381 C; Colours for specific purposes, are No. 537, signal red; No. 557, light orange; No. 355, lemon; No. 228, emerald green and No. 166, French Blue.

FIFTH SCHEDULE *(Sections 9 and 10)*

INSTRUCTIONS TO DRIVER TO BE DISPLAYED IN VEHICLE

1. All hazard-warnings and compartment labels are displayed, kept clean and free from obstruction at all times.
2. Follow the route as advised by the operator.
3. Vehicle not to be left unattended at any time.
4. Ensure that certificate of fitness is in the vehicle.
5. Ensure that the emergency procedure card is in the vehicle.

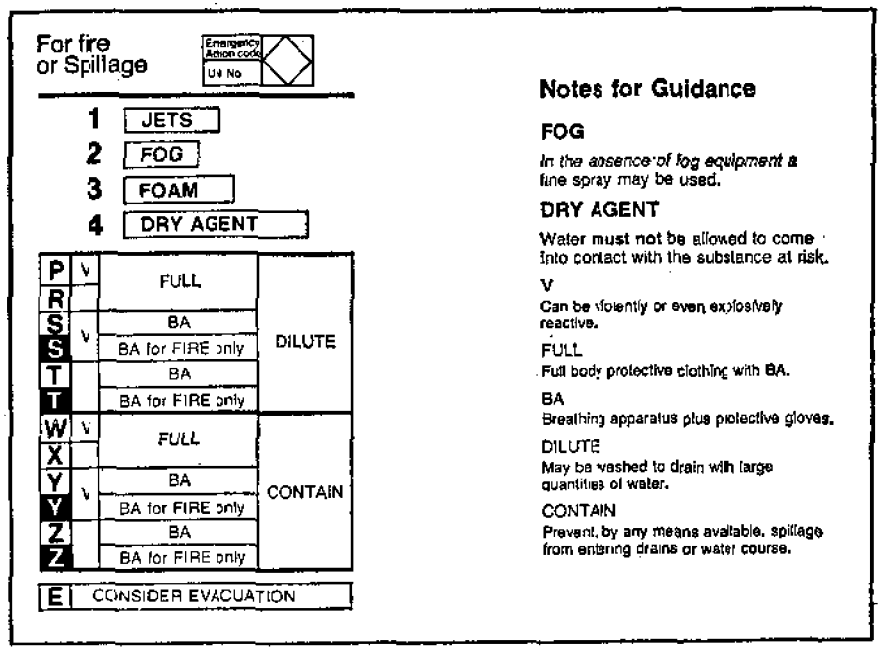
EXPLANATORY NOTES

(These notes are not part of the regulations)

1. These regulations impose requirements for notice to be displayed on road tankers which are being used for the conveyance by road of hazardous substances (those substances specified in the First Schedule).
2. The regulations impose a duty on the operator of a road tanker to ensure that it carries hazard-warning panels and, in the case of compartmented tanks carrying different substances, labels in respect of the compartments. The operator is required to instruct the driver in the significance of the panels and labels. The consignor of a hazardous substance is required to give the operator the information necessary for him to prepare the panels and labels; and the driver is required, so far as is reasonably practicable, to keep them clean and to ensure that they continue to be displayed.
3. The regulations apply from the commencement of loading until the tank has been completely cleaned out whether or not the vehicle is on a road; they do not apply in certain emergency situations.
4. Appendix 1 is an example for a convenient form of emergency action code interpretation.
5. Appendix 2 shows a suggested design for a composite sign holder.

APPENDIX I

A Convenient Form of Emergency Action Code Interpretation



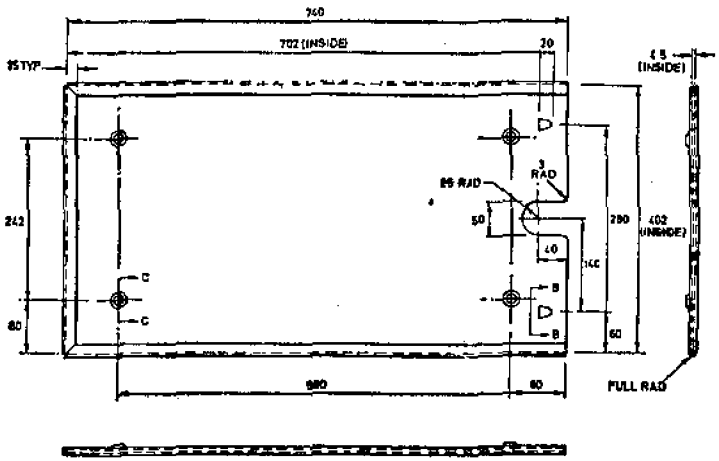
APPENDIX II

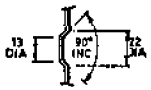
Suggested Specifications for the Holder of the Composite Sign

OBJECTIVE

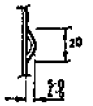
To provide a standard holder to contain the composite label mounted on a rigid backing sheet which is suitable for fitting to existing road tankers. Alternative designs allow for rear and top entry of the label.

Design No 1 (side entry)





Part section on 'C-C'
(Typ. 4 positions)
Scale 1:2



Part section on 'B-B'
Card retention 'pips'
Scale 1:2

Notes:-

1. Manufactured from 1.5 mm or 16 SWG aluminium alloy.
2. All dimensions in millimetres.

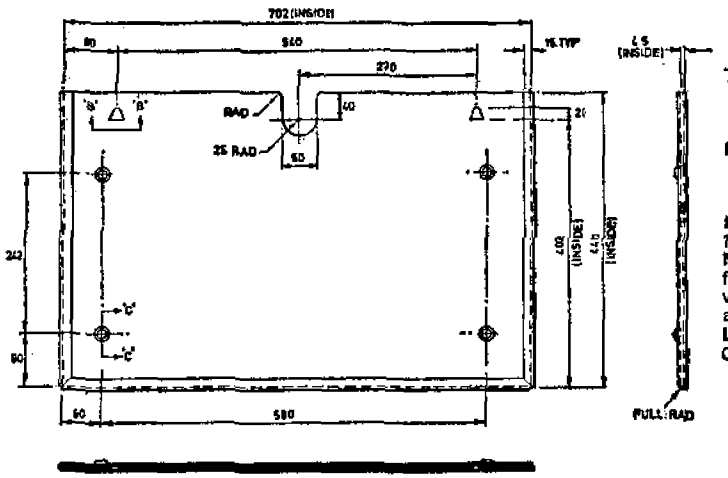
SPECIFICATION

No. off 3 per vehicle

Frame Dimension

Rear Entry Length 740mm
Height 402mm
Thickness 7½mm

Design No 2 (top entry)



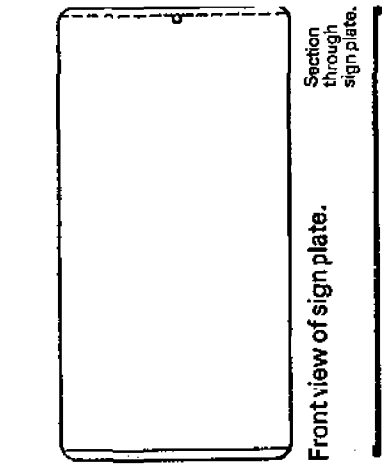
Top Entry
Length 702mm
Height 440mm
Thickness 7½mm

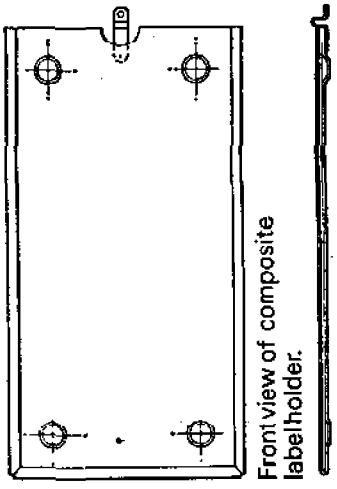
Backing sheet Dimensions
Length 700mm
Height 400mm
Thickness 3mm max.

Frame Materials Aluminium or other suitable sheet 1.5mm or 16 s.w.g.

Method of Fixing Standard four point fixing for both frames. Fix with bolts to brackets provided on the vehicle. Open side of frame to rear or top of vehicle as appropriate.

Location of Frames
One on near side One on off side One on rear





Design No 3

BRIEF SPECIFICATION
Material 18g aluminium. Label holder black anodized.
4no recessed fixing holes. Stainless steel retaining spring clip.
Sign plate – short edges folded with radius corners.
Overall size of holder – 710mm x 410mm. Sign plate – 700mm x 400mm.