Medical supplies on board Dutch sea-going vessels and fishing vessels, an explanation

The official text of the regulation is published in Dutch on Dutch government websites: www.overheid.nl > Officiële publicaties > Regeling veiligheid zeeschepen, article 25, 49 and annex 2.

Under the Ships Order, the Fishing Vessels Order and the Regulation Safety Seagoing Vessels (= Regeling veiligheid zeeschepen), Dutch sea-going vessels must carry medical supplies. What supplies are required depends on the category of vessel, the sailing area, the cargo being carried as well as the number of signed-on crewmembers on board.

In 2006, revision of the existing medical chest was required as some medicines had been withdrawn or replaced. Some articles no longer met the current medical standards of treatment.
The new supplies allow not only for medical arguments but also for shelf life, the desire to avoid injections where possible and the cost aspect. As a result it is not always the medicines of first choice for GPs or specialists that have been selected.

At the same time, legislators have decided to make a few more adjustments.
The medical chest is now part of the Regulation Safety Seagoing Vessels and adjusted to the 'Beter Geregeld' programme aimed at simplification and reduction of regulations.
An attempt has been made to streamline and simplify the requirements for medical provisions. This is apparent in the uniformity introduced into the various sailing areas and in more compact tables of mandatory medicines and medical equipment. Some columns were deleted or combined and the memoranda concerning the oxygen supply and the stretcher were changed. In accordance with the government's general policy to reduce the number of rules and regulations, a certificate of approval from the Netherlands Shipping Inspectorate is no longer required for oxygen equipment and stretchers. Also due to the reduction of rules and regulations, the regulations concerning installation and use of the 40-litre oxygen cylinders on board ships carrying dangerous goods are no longer described in detail. The Notice to Shipping no 35/1965 (Acetylene welding and cutting installations) still applies.
This does not alter the fact that seafarers' safety always takes priority. The same degree of safety must obviously be maintained. How this is done, however, has become more of a responsibility of the ship owner and the captain or skipper than it was in the past.

Delivery and packaging
Medicines and antidotes are to be obtained from a pharmacist. This must be stated clearly, for example by a trademark, on the packaging.
On the labels of the various items, the Latin nomenclature is to be used as far as possible alongside the Dutch.
The Latin nomenclature shall correspond to that of the World Health Organization.
The code number has to be mentioned as well.
The captain or skipper has the final responsibility to check that labels are filled in and attached correctly.

Storage
The medicines and medical equipment are to be kept in appropriate containers or cupboards or rooms equipped for this purpose.
Each medicine should be stored in the packaging in which the pharmacist supplied it. The medical supplies must be stored in dry conditions and at room temperature (15-25°C).
If it is indicated that an item is to be stored "cool", this means that the item deteriorates in quality and efficacy if it is not kept refrigerated.

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Certain drugs are covered by the Opium Act (= Opiumwet) and should be kept separately in the safe, the key to which is held by the captain.
These drugs, of which morphine is the most familiar, must be listed on the store list and/or special list furnished by the local authorities. Which drugs have to be listed differs from one country to another. Diazepam for example has to be listed as "controlled drug" at times.
A list of various classes of Opium Act drugs and a specimen checklist and order list can be found in the Dutch Medical Guide for Ships.

Responsibilities
The management of the medical supplies is the captain's or skipper's responsibility. He may, however, delegate its use and maintenance to another crew member. Just like the captain, this crew member should hold a valid certificate in Maritime Medical Training indicating that he has received the required education.

Checks and inspections
Checking the medical supplies (except the medicine chests in the self-inflating life rafts) is the captain's or skipper's duty. He is responsible for medical supplies being in good condition and being replenished and replaced, where necessary, as soon as possible. The items must be stored in accordance with the applicable regulations. Medicines bearing an expiry date must be replaced before that date. He may delegate this duty to a pharmacist but he is still responsible for the content and quality of the medical supplies.
The captain keeps a checklist, which must show in a well-organized manner the items statutorily prescribed for the medical supplies and the quantities actually present with their expiry dates.
Inspecting the checklists is part of the annual inspection by the classification society or the Shipping Inspectorate.

Tables
The tables "Medicines" and "Equipment" show the statutory articles.

Columns

Column A:	cargo ships, sailing vessels and fishing vessels with unlimited sailing area;
Column B:	cargo ships, sailing vessels and fishing vessels with a sailing area limited to the GMDSS Sea Area A2 as stipulated in regulation IV/2 of the SOLAS convention;
Column C:	cargo ships, sailing vessels and fishing vessels with a sailing area limited to the GMDSS Sea Area A1 as stipulated in regulation IV/2 of the SOLAS convention, up to 30 miles from the coast of a European country;
Column D:	passenger vessels excluding vessels on which short international or national voyages are made as stipulated in regulation III/3 of the SOLAS convention[α];
Column E:	passenger vessels with which short international or national voyages are made as stipulated in regulation III/3 of the SOLAS convention;
Max.	maximum quantities;
Column R:	lifeboats, life rafts and rescue vessels per 50 persons.

[α] "Short international voyage" is an international voyage in the course of which a ship is not more than 200 miles from a port or place in which the passengers and crew could be placed in safety. Neither the distance between the last port of call in the country in which the voyage begins and the final port of destination nor the return voyage shall exceed 600 miles. The final port of destination is the last port of call in the scheduled voyage at which the ship commences its return voyage to the country in which the voyage began.

The classification of sea-going vessels in columns roughly corresponds to the categories in the previous regulations. The current classification however fits in better with the areas of validity already in force with the certificates of Maritime Medical Training, required to manage, use or maintain the medical supplies.
Wherever possible the columns of cargo ships, sailing vessels and ships carrying dangerous goods are combined, with an alternative quantity stipulated for ships carrying dangerous goods. In the latter case, the quantity appears in [ ] parentheses.

Quantities
The quantities in the columns A to E inclusive apply to a crew of up to 15 signed-on crew members.
For a crew of 16-24 the quantities are increased by 50%, except for the items for which a quantity of 1 is laid down.
For a crew of 25-30 the quantities are doubled.
For a crew of 31-45 the quantities are trebled.
For a crew of 46-60 the quantities are quadrupled, and so on.
The quantities in the column Max. do not need to be exceeded.

The maximum quantities in column R (lifeboats, life rafts and rescue vessels) apply to equipment for up to 50 persons.
For a capacity of 51-100 the quantities are doubled.
For a capacity of 101-200 the quantities are trebled, and so on.
Anti-seasickness remedies are an exception to the rule: quantities are given per person.

Additional codes
If the code "RMA" is indicated for a medicine this means that in principle it may only be administered or applied at the advice of a doctor, generally of the Radio Medical Assistance.
If the code number is followed by an ".f" this means that the item is prescribed only in the case of one or more female crew members.
If the code number is followed by a ".t" this means that the item is prescribed only on voyages in tropical waters.
If the code number is followed by a ".z" this means that the item is prescribed only for sailing vessels.
Quantities shown in "[ ]" relate to items prescribed for vessels carrying dangerous goods.

The table with its columns and quantities should be read as follows:

Code	*Add. code*	*Requirements*	*A*	*B*	*C*	*D*	*E*	*Max.*	*R*
1.4.02	RMA	Phytomenadione amp 10 mg/1 ml (im injectable)	2^z [10]	2^z [5]	2^z	2	2 [5]	4 [15]	-

A Cargo ships and fishing vessels: quantity = 0.
Sailing vessels: quantity = 2 per 15 persons, maximum quantity = 4.
Ships carrying dangerous goods: quantity = 10 per 15 persons, maximum quantity = 15.
B Cargo ships and fishing vessels: quantity = 0.
Sailing vessels: quantity = 2 per 15 persons, maximum quantity = 4.
Sips carrying dangerous goods: quantity = 5 per 15 persons, maximum quantity = 15.
C Cargo ships and fishing vessels: quantity = 0.
Sailing vessels: quantity = 2 per 15 persons, maximum quantity = 4.
D Passenger ships, unlimited sailing area: quantity = 2 per 15 persons, maximum quantity = 4.
E Passenger ships, limited sailing area: quantity = 2 per 15 persons, maximum quantity = 4.
Passenger ships carrying dangerous goods, limited sailing area: quantity = 5 per 15 persons, maximum quantity = 15.
R Lifeboats etc. quantity = 0.

Antidotes
The list of antidotes is unchanged. It has become apparent that quantities of medicines that must be kept on board vessels with and without the dangerous goods could be reduced.

As already known, the IMO-working group has decided to take deliberate ingestion not into account:. The focus therefore is on skin contact and inhalation of dust, vapours and gases.
The approach to accidents involving dangerous substances now focuses mainly on carrying out life-saving operations, removing the dangerous substance and treating the general symptoms that result from poisoning.
Oxygen is regarded as crucial to the treatment of many types of poisoning.
Nevertheless, in the event of major disasters involving dangerous goods the quantity of medicines available will always be inadequate.

Errata
The formal publication of the regulation appeared to be not letter-perfect.
At article 9.3.03 the dropper bottle 10 ml has been left out, at 10.2.10 ≥ 95% should be read instead of 95%, at item no. II.1.02.c the footnote no 5 behind the word bar[5] may be deleted as this is nonexistent and the additional code "t" has to be added to article II.8.04. In this present document the tables have been adjusted in order.
Item no II.7.03 can be interpreted as: a set of vacuum splints, suitable for immobilization of a forearm, upper arm, lower leg and upper leg.

Articles that have been removed or altered
A list of the most significant changes with respect to the medical supplies of 2001 is enclosed.

Malaria
The quantities of proguanil and choloroquine have now been drastically reduced due to the fact that the combination can no longer be recommended because of increased resistance, especially along the coast of West Africa. Proguanil must, however, still be kept on board for the prophylaxis of milder forms of malaria.
Chloroquine is still needed for the treatment of less complicated, mild malaria.
Malarone® is, in view of the above, now the first-choice medicine. Usage is limited to 4 consecutive weeks. More extended usage is possible only after the seafarer has signed a declaration of informed consent in the presence of a physician.

Stretcher
A stretcher must be carried on board as soon as the prescribed crew exceeds three persons.
A stretcher is not required on board sailing vessels less than 24 metres in length.

A certificate of approval from the Netherlands Shipping Inspectorate is no longer required for stretchers.
The same degree of safety must obviously be maintained.
Statutory requirements are specified in the regulation. They roughly cover the conditions on which a certificate of approval was issued previously. A list of formerly certified stretchers is attached.

Oxygen equipment
Oxygen equipment is now required on board category B ships not carrying dangerous goods.
In the event of serious accidents also in a limited sailing area, oxygen is an important aid for the prevention of additional tissue damage. With regard to head injuries for example, the likelihood of brain damage is reduced if oxygen is administered.
In the event of a heart attack, administering oxygen quickly can help minimise the likelihood of complications.
With regard to serious infectious diseases with imminent shock, administering oxygen helps bridge the period that elapses before the victim can be brought to shore.

A certificate of approval from the Netherlands Shipping Inspectorate is no longer required for oxygen giving sets. Statutory requirements are specified in the regulation. They roughly cover the conditions on which a certificate of approval was issued previously. A list of formerly certified oxygen giving sets is attached.

Oxygen on board ships carrying dangerous goods
The regulations concerning installation and use of the 40-litre oxygen cylinders on board ships carrying dangerous goods are also no longer described in detail.
In view of the danger of explosion associated with oxygen under pressure, appropriate storage is to be arranged for spare oxygen cylinders, preferably in the open air or in a ventilated space.
How this is done is, however, more than in the past the responsibility of the ship owner and the captain. The guidelines in Notices for Shipping No. 35/1965 should be followed as closely as possible.
The document is enclosed (in Dutch).

Medical Guide
Except for vessels in column C, which are required to carry the Orange Cross first aid booklet, the medical handbook prescribed for the use of the medical supplies is the Dutch Medical Guide for Ships (= Geneeskundig Handboek voor de Scheepvaart), latest edition including supplements.
The Dutch Medical Guide currently consists of two parts, Part 2 (Medical First Aid Guide for Use in Accidents Involving Dangerous Goods -MFAG-) of which should be present on board vessels carrying dangerous goods.

If an English version of the handbook is desirable, the UK "Ship Captain's Medical Guide" is a good choice. The Dutch handbook is a translation of the English edition of 1983. Both handbooks have been updated independently, but still have many points in common.

Netherlands Antilles and Aruba
It is important to note that changes to the regulations in question are relevant only for the Netherlands. The Regulation Safety Seagoing Vessels does not apply to ships from the Netherlands Antilles and Aruba. The old regulations published in 1995 apply to them.

Table 1. Medicines, limitative list

Code	Add. code	Requirements	A	B	C	D	E	Max.	R
cardiovascular									
1.1.02	RMA	Adrenaline amp 1 mg/1 ml (im, iv and sc injectable)	6	3	-	6	6	12	-
1.2.02	RMA	Isosorbide-dinitrate tabl 5 mg	20	10	10	20	20	60	10
1.3.03	RMA	Furosemide amp 40 mg/4 ml (im and iv injectable)	3 [10]	2 [10]	-	3	2 [10]	6 [20]	-
1.4.02	RMA	Phytomenadione amp 10 mg/1 ml (im injectable)	2[z] [10]	2[z] [5]	2[z]	2	2 [5]	4 [15]	-
1.4.03	RMA	Oxytocine amp 5U/1 ml (im and iv injectable)	6[f]	3[f]	3[f]	6	3	12	-
1.5.02	RMA	Metoprolol tabl 50 mg	30	10	-	30	10	60	-
1.6.02	RMA	Calcium carbasalate 100 mg or Acetyl salicylic acid tabl 80 mg	20	10	-	20	10	40	-
gastrointestinal system									
2.1.04		Algeldrate+magnesiumhydroxide susp, bottle 300 ml	2	1	-	4	2	8	-
2.1.05	RMA	Omeprazole tabl/caps 20 mg	60	30	-	60	30	150	-
2.2.02	RMA	Domperidon supp 60 mg	18	6	3	18	18	36	-
2.2.02R		Metoclopramide supp 20 mg	-	-	-	-	-	-	3
2.2.03	RMA	Metoclopramide amp 10 mg/2 ml (im injectable)	5 [30]	- [10]	-	5	- [10]	10 [60]	-
2.3.01		Lactulose syrup, bottle 300 ml	2	1	-	2	1	4	-
2.3.02	RMA	Sodium laurylsulfoacetate/Sorbitol/Sodium citrate microclyster	12	4	-	12	12	24	-
2.4.01		Loperamide caps 2 mg	80	40	40	80	40	200	40
2.6.01		Vaseline/lignocaine cream 3%, tube 30 g	2	1	-	2	1	5	-
analgesics and anti-spasmodics									
3.1.02		Ibuprofen coated tabl 400 mg	40	20	-	40	20	100	-
3.1.03		Paracetamol tabl 500 mg	80 [200]	40 [100]	20	80	80 [100]	200 [300]	80
3.2.03	RMA	Morphine HCl amp 10 mg/1 ml (im and sc injectable) (TO BE KEPT IN A SAFE)	10 [40]	5 [10]	-	10	10 [20]	30 [40]	-
3.2.04R	(RMA)	Tramadol caps 50 mg	-	-	-	-	-	-	30
3.3.02	RMA	Diclofenac supp 100 mg	10	5	5	10	5	20	5
3.4.01	RMA	Naloxone amp 0,4 mg/1 ml (im and iv injectable)	3 [6]	3 [6]	-	6	6 [12]	15 [24]	-
nervous system									
4.1.02	RMA	Diazepam microclyster 10 mg/2,5 ml	10 [10]	2 [5]	-	10	5 [20]	20 [20]	-
4.1.03	RMA	Oxazepam tabl 10 mg	20	10	-	20	10	50	-
4.2.01	RMA	Haloperidol tabl 1 mg	20	10	-	20	10	50	-
4.2.02	RMA	Haloperidol amp 5 mg/1 ml (im and iv injectable)	10	2	-	10	5	20	-
4.3.02		Cyclizine supp 100 mg	20	10	-	20	20	100	-
4.3.03		Cinnarizine tabl 25 mg	50	20	10	50	50	200	6 pp
4.4.02	RMA	Carbamazepine tabl 200 mg	20	10	-	20	20	50	-
4.5.01	RMA	Temazepam tabl/caps 10 mg	20	10	-	20	20	50	-

Code	Add. code		Requirements	A	B	C	D	E	Max.	R
anti-allergics and anti-anaphylactics										
5.1.03		RMA	Clemastine tabl 1 mg	20	10	-	20	20	50	-
5.1.04		RMA	Clemastine amp 2 mg/2 ml (im and iv injectable)	3	2	-	3	2	6	-
5.2.02		RMA	Dexamethasone amp 5 mg/1 ml (im and iv injectable)	5	2	-	5	2	5	-
respiratory system										
6.1.02		RMA	Salbutamol 0,1 mg/ds, inhaler 200 ds	2 [5]	1 [5]	-	2	1 [5]	4 [5]	-
6.1.03		RMA	Beclomethasone 0,05 mg/ds, inhaler 200 ds	- [5]	- [5]	-	-	- [5]	- [5]	-
6.1.04			Volumatic device to be used with 6.1.02 and 6.1.03	1 [2]	1 [2]	-	1	1 [2]	1 [2]	-
6.2.01			Dextromethorfan syrup, bottle 200 ml	3	1	-	3	1	6	-
6.3.01			Xylomethazoline nasal drops 0,1%, dropper bottle 10 ml	5	3	-	5	3	10	-
anti-infection										
7.1.01		RMA	Amoxicillin caps 500 mg	60	20	-	60	20	120	-
7.1.07		RMA	Doxycycline tabl 100 mg	20	5	-	20	5	50	-
7.1.08		RMA	Cefuroxime amp 750 mg + 5 ml solvent (im injectable)	15	6	-	15	6	30	-
7.2.02		RMA	Cotrimoxazole tabl 800+160 mg	30	10	-	30	10	60	-
7.4.02		RMA	Metronidazole tabl 500 mg	20	10	-	20	10	50	-
7.4.03		RMA	Metronidazole supp or ovule 500 mg(1)	- [10]	-	-	-	-	- [25]	-
7.5.01		RMA	Ciprofloxacin tabl 250 mg	40	20	-	40	20	100	-
7.6.01		RMA	Tetanus vaccine amp 0,5 ml (im injectable) (STORE IN A COOL PLACE)	5	2	-	5	2	5	-
7.6.02		RMA	Anti-tetanus immunoglobulin amp 250 E/2 ml (im injectable) (STORE IN A COOL PLACE)	3	1	-	3	1	5	-
7.7.01	.t	RMA	Quinine sulphate tabl/coated tabl 200 mg	70	70	-	70	70	200	-
7.7.02	.t		Proguanil tabl 100 mg(2)	500	250	-	500	500	1500	-
7.7.03	.t		Chloroquine sulphate tabl 100 mg(2)	60	30	-	60	60	180	-
7.7.04	.t	RMA	Quinine hydrochloride amp 600 mg/2 ml (im injectable)	10	5	-	10	5	20	-
7.7.05	.t		Malarone® tabl 250/100 mg(2)	250	125	-	250	125	750	-
	.t	RMA	Aqua dest amp 5 ml for dilution 7.7.04 (im injectable)	20	10	-	20	10	40	-
compounds promoting rehydration, caloric intake and plasma expansion										
8.1.01			Oral Rehydration Salts, WHO-formula. sachet to give 1 litre rehydration solution	18	6	-	18	6	36	-
8.1.02		RMA	NaCl 0,9% infusion, bottle 500 ml IV giving set, see II.5.05f	2 [10]	1 [6]	-	4	2 [6]	4 [10]	-
8.3.01		RMA	Plasma substitute of choice, bottle 500 ml	5	3	-	5	3	10	-

Code	Add. code	Requirements	A	B	C	D	E	Max.	R
		IV giving set, see II.5.05f							-
skin medicines									
9.1.03		Chlorhexidine 0,5%, bottle 30 ml	4	2	1	4	2	8	1
9.1.04		Chlorhexidine/Cetrimide solution, bottle 250 ml	3	1	-	3	3	5	-
9.1.05		Ethanol 70% based hand sanitizer	2	1	-	2	1	4	-
9.1.08		Betadine ointment, tube 30 g	3	2	1	3	2	6	2
9.1.09		Capsicum compositum cream, tube 30 g	3	1	-	3	1	6	-
9.1.10		Miconazol nitrate cream 2%, tube 30 g	4	2	-	4	2	8	-
9.1.13	RMA	Silver sulphadiazine cream 1%, tube 50 g (STORE IN A COOL PLACE)	5	3	1	5	5	8	-
9.1.13R		Long-shelflife antiseptic cream suitable for treatment of burns	-	-	-	-	-	-	1
9.1.14R		Sun screen cream, waterproof, tube 25 g, factor 20 (EU) of 22 (USA)	-	-	-	-	-	-	2
9.1.15		Alumnis compositum powder, can 100 g	4	1	-	4	2	8	-
9.1.18		Lanette/menthol cream 2%, tube 10 g	2	-	-	2	1	5	-
9.1.20		Permethrin lotion 10 mg/g, bottle 59 ml	3	1	-	3	1	5	-
9.1.21	RMA	Hydrocortisone 1%, tube 30 g	2	1	-	2	1	4	-
eye medicines									
9.2.03	RMA	Tetracaine eye drops 0,5%, unit dose (STORE IN A COOL PLACE)	20	10	-	20	10	40	-
9.2.04	RMA	Pilocarpine eye drops 2%, dropper bottle 10 ml (STORE IN A COOL PLACE)	1	1	-	1	1	2	-
9.2.05		Fluorescein paper strips 1%, packet cont. 10 pcs	1	1	-	1	1	2	-
9.2.06		Tetracycline ointment 1%, tube 4g (STORE IN A COOL PLACE)	2 [5]	1 [3]	1	2	1 [3]	4 [10]	1
9.2.07		Fusidic acid eye gel 1%, unit dose 0,2 g (STORE IN A COOL PLACE)	24	12	-	24	12	48	-
ear medicines									
9.3.03		Neomycine/Polymyxine-B/Hydrocortison eardrops, bottle 10 ml	2	1	-	2	1	4	-
medicines for oral and throat infections									
9.4.01		Chlorhexidine mouthwash 2%, bottle 200 ml	2	1	-	2	1	4	-
local anaesthetics									
9.5.02		Lignocaine 2%, bottle 20 ml, no adrenaline (im and sc injectable)	2	1	-	2	1	4	-
9.5.03		Oleum carophylli (oil of cloves), dropper bottle 10 ml	1	1	-	1	1	1	-
additional antidotes									

Code	Add. code	Requirements	A	B	C	D	E	Max.	R
10.1.01	RMA	Calcium gluconate gel 2%, tube 25 g	- [5]	- [5]	-	-	- [10]	- [40]	-
10.2.05	RMA	Atropine sulphate amp 1 mg/1 ml (im and iv injectable)	- [15]	- [15]	-	-	- [30]	- [100]	-
10.2.06	RMA	Calcium gluconate effervescent 1 g	- [20]	- [20]	-	-	- [40]	- [100]	-
10.2.09	RMA	Activated charcoal, powder, 50 g	- [2]	- [2]	-	-	- [2]	- [2]	-
10.2.10	RMA	Ethyl alcohol solution ≥ 95%, bottle 500 ml	- [3]	- [1]	-	-	- [1]	- [3]	-
miscellaneous									
12.1.01	RMA	Glucagon amp 1 mg + 1 ml solvent (im and iv injectable) (STORE IN A COOL PLACE)	2^z	2^z	2^z	4	2	4	-

(1) There may be practical problems with the preparation and supply of metronidazole suppositories. According to information supplied by the manufacturer it is possible to use vaginal ovules rectally. Ovules (Flagyl) are thus an equivalent alternative.

(2) To be used for malaria prophylaxis. See the Dutch Medical Guide for Ships for further information. The latest information should also be acquired concerning regions of resistance. Malarone® is registered in the Netherlands only for up to 4 weeks' use. The seafarer concerned shall sign a form of "informed consent" with a physician for use for more than four consecutive weeks.

Table 2. Equipment

Code	Requirements	A	B	C	D	E	Max.	R
resuscitation equipment								
II.1.01	Manual resuscitator bag extra with mask, preferably to be stored with II.1.02.a	- [1]	- [1]	-	-	- [1]	- [1]	-
II.1.02.a	Portable oxygen set complete, with instructions for use, including 1 oxygen cylinder 2 l/200 bar, pressure regulating unit with flowmeter, distributor with external oxygen connection and manual resuscitator with mask	1	1	-	1	1	1	-
II.1.02.b	Oxygen cylinder spare 2 l/200 bar preferably to be stored with II.1.02.a	- [1]	- [1]	-	-	- [3]	- [3]	-
II.1.02.c	Oxygen cylinder filled with medicinal oxygen 40 l/200 bar or split up in 4 bottles at most all carrying the same colour coding, filling pressure and connection, ready for use in the sick-bay, with 2 flowmeters for supplying of oxygen for 2 persons at the same time(1).	- [1]	- [1]	-	-	- [1]	- [1]	-
II.1.03	Mechanical aspirator to clear upper respiratory passages, preferably to be stored with II.1.02.a	1	1	-	1	1	1	-
II.1.04	Brook Airway or Lifeway or equivalent	1 [2]	1 [2]	1	2	2	4	1
II.1.05.a	Guedel (Mayo-tube) no 2	- [2]	- [2]	-	-	- [2]	- [4]	-
II.1.05.b	Guedel (Mayo-tube) no 3	- [2]	- [2]	-	-	- [2]	- [4]	-
II.1.05.c	Guedel (Mayo-tube) no 4	- [2]	- [2]	-	-	- [2]	- [4]	-

Code	*Requirements*	*A*	*B*	*C*	*D*	*E*	*Max.*	*R*
II.1.06	Facemasks disposable (up to 60% oxygen) with flexible connecting hoses, preferably to be stored with II.1.02.a	2 [10]	2 [10]	-	2	2 [10]	6 [20]	-
dressing and suturing equipment								
II.2.01	Suture kit with needles: see II.2.13 and II.3.01 to II.3.06.							
II.2.02	Adhesive elastic bandage 4 m/6 cm	1	1	1	2	1	2	1
II.2.03.c	Hydrolast bandage 4 m/6 cm	30	15	8	60	60	120	-
II.2.04	Tubular gauze bandage for finger dressings with applicator, 5 m	4	1	1	4	4	12	-
II.2.05.a	Sterile gauze compresses 5x5 cm sterile, packet cont. 16 pcs	10	5	1	20	20	40	-
II.2.05.b	Sterile gauze compresses 10x10 cm, sterile, packet cont. 25 pcs	3	2	1	3	3	10	1
II.2.05.c	Vaseline gauze dressing 10x10 cm, sterile	20	10	10	20	20	40	10
II.2.06	Absorbent cotton wadding, 100 g	4	2	1	4	4	10	-
II.2.07.a	Metalline sheet 73x250 cm, sterile	1	1	-	2	2	2	-
II.2.08	Triangular sling (cotton wool)	4	4	4	4	4	4	4
II.2.09.a	Disposable polyethylene gloves, in pairs	12	6	3	12	12	24	3
II.2.09.b	Surgical gloves size M, sterile, in pairs	3	2	-	6	12	12	-
II.2.09.c	Surgical gloves size L, sterile, in pairs	3	2	-	6	12	12	-
II.2.10.b	Adhesive wound-plaster, waterproof, 1 m/6 cm	3	2	1	3	2	6	1
II.2.11.a	Sterile compression bandage no 1 small	4	4	1	10	10	20	2
II.2.11.b	Sterile compression bandage no 2 medium	10	4	2	20	20	40	4
II.2.11.c	Sterile compression bandage no 3 large	4	4	1	10	10	10	1
II.2.12.a	Adhesive tape, waterproof, 5 m/1¼ cm	2	1	1	2	2	5	1
II.2.12.c	Butterfly bandage, sterile	20	10	5	20	20	40	5
II.2.13.c	Sutures with non-traumatic needles vicryl 4-0	10	5	-	10	10	20	-
II.2.13.d	Sutures with non-traumatic needles ethilon 3-0	10	5	-	10	10	20	-
II.2.13.e	Sutures with non-traumatic needles ethilon 5-0	10	5	-	10	10	20	-
II.2.14	Synthetic wadding 3 m/10 cm	2	1	-	2	2	4	-
II.2.15.a	Eye patch	2	1	-	3	3	3	-
II.2.15.b	Eye pad gauze, packet cont. 5 pcs	2	1	-	3	3	3	-
II.2.16	Safety pins (stainless-steel), 12 pcs	2	1	1	3	3	3	1
instruments								
II.3.01	Scalpel sterile disposable	3	3	-	3	3	6	-
II.3.02	Instrument box (stainless-steel)	1	1	-	1	1	2	-
II.3.03.a	Scissors surgical strait (stainless-steel)	1	1	-	1	1	2	-
II.3.03.b	Scissors Lister 18 cm (stainless-steel), not to be stored in II.3.02	1	1	1	1	1	3	1
II.3.04.a	Forceps dissecting (stainless-steel)	1	1	-	1	1	2	-
II.3.04.b	Forceps teeth tissue (stainless-steel)	1	1	-	1	1	2	-
II.3.05	Haemostatic clamp Kocher (stainless-steel)	1	1	-	1	1	2	-
II.3.06	Needle forceps Mathieu 17 cm (stainless-steel)	1	1	-	1	1	2	-
II.3.07	Razor disposable	5	2	-	5	5	10	-
II.3.08	Forceps splinter (stainless-steel)	1	1	-	1	1	2	-
II.3.09	Ring saw (stainless-steel)	1	1	-	1	1	1	-
II.3.10	Eye lis	1	1	-	1	1	2	-
examination and monitoring equipment								

Code	*Requirements*	*A*	*B*	*C*	*D*	*E*	*Max.*	*R*
II.4.01	Tongue depressors disposable	50	10	-	50	50	100	-
II.4.02	Reactive strips for urine analysis: blood/glucose/protein/nitrite/leucocytes, 50 strips	1	1	-	1	1	2	-
II.4.03	Temperature/pulse charts	20	5	-	20	20	40	-
II.4.04	Medical evacuation sheets	4	2	-	4	4	10	-
II.4.05	Stethoscope	1	1	-	1	1	1	-
II.4.06	Aneroid sphygmomanometer, preferably automatic	1	1	-	1	1	1	-
II.4.07	Standard clinical thermometer	3	2	-	3	3	6	-
II.4.08	Hypothermic thermometer	1	1	-	1	1	1	-
II.4.09	Penlight type flash light + blue cover	2	1	-	2	2	2	-
equipment for injection, perfusion, puncture and catheterization								
II.5.01	Urine drainage set: see II.5.04/.06/.07							
II.5.02.a	Rectal drip set, including 1 catheter	1	-	-	1	1	2	-
II.5.02.b	Catheter 26 Fr to be used with rectal drip set	[6]	-	-	-	-	[12]	-
II.5.04	Urine drainage bag with penile sheath set	2	-	-	2	1	2	-
II.5.05.a	Syringes 2 ml disposable	50 [100]	25 [50]	5	50	40 [50]	100 [200]	-
II.5.05.b	Syringes 5 ml disposable	10	5 [10]	-	10	10	20 [20]	-
II.5.05.c	Needles sc 16x½ mm, sterile, for II.5.05.a/.b	25	10	-	25	10	50	-
II.5.05.d	Needles im 40x0,8 mm, sterile, for II.5.05.a/.b	50 [100]	25 [50]	5	50	25 [50]	100 [200]	-
II.5.05.e	IV infusion canula 1,2 mm, to be used with iv giving set	4 [10]	2 [10]	-	8	4 [10]	8 [20]	-
II.5.05.f	IV giving set to be used with 8.1.02 and 8.3.01	4 [10]	2 [10]	-	8	4 [10]	8 [20]	-
II.5.05.g	Tourniquet, blood-taking type to be used with in infusion canula	1 [2]	1 [2]	-	2	1 [2]	4 [4]	-
II.5.06	Catheter sterile Thieman without balloon, no 16 and 12 each	1	-	-	1	1	2	-
II.5.07	Lubricant lignocaine 2%/chlorhexidine 0,05%, syringe	2	-	-	2	2	4	-
II.5.08	Basin, kidney shape (stainless-steel)	2	1	-	1	1	4	-
general medical equipment								
II.6.01	Bedpan (stainless-steel)	1	-	-	2	2	3	-
II.6.02	Hot-water bag	1	1	-	2	1	3	-
II.6.03	Urinal, male (glas)	1	-	-	2	2	3	-
II.6.04	ColdHotpack Maxi 20x30 cm (STORE IN FREEZER)	1	1	1	1	1	2	-
II.6.06	Aluminium foil blanket	1	1	1	2	2	4	1
immobilization and setting equipment								
II.7.01	Malleable finger splint 30 cm (aluminium)	2	1	-	2	2	4	-
II.7.02	Malleable forearm/hand/leg splint 70 cm, set of 6	1	1	-	1	1	2	-
II.7.03	Vacuum splints (half/full arm, half/full leg) with hand force pump	1	1	1	2	2	3	-
II.7.04	Thigh splint Thomas	1	1	-	1	1	2	-
II.7.05	Neck collar, Stifneck Select or equivalent: adjustable	2	2	-	2	2	4	-
II.7.06	Dimple mattress with foot-pump	1	-	-	1	1	1	-

Code	Requirements	A	B	C	D	E	Max.	R
II.07.07	As soon as the prescribed crew exceeds 3 persons: stretcher(2)	1	1	1	2	2	2	-
disinfection, disinsectization and prophylaxis								
II.8.01	Disinfectant for drinking water suitable for human consumption in sufficient quantity to disinfect the complete on-board water supply in one application.	2	1	-	2	2	5	-
II.8.04**.t**	Diethyl-toluamide (DEET) 50% insect repellent, bottle 30 ml	30	15	-	30	30	60	-
II.8.05	Sprayable pesticide of choice, effective against flying and creeping insects, bottle	2	1	-	2	1	10	-
miscellaneous								
II.9.01.b	Bodybag	1 [2]	-	-	2	-	1 [2]	-
II.9.03	Condoms	50	20	-	50	50	100	-
II.9.04	Pedal bin (stainless-steel)	1	-	-	1	1	1	-
	Plastic bags for pedal bin, 20 pcs	2	-	-	2	2	4	-
II.9.05	Microscope slides, 12 pcs	1	-	-	1	1	1	-
II.9.06	Q-tips (wooden)	50	20	-	50	50	100	-
II.9.07	Flexible straws	20	10	-	20	20	40	-
II.9.10	Dutch Medical Guide for Ships, last edition, including supplements	1	1	-	1	1	1	-
II.9.11	MFAG, last edition, including supplements as stipulated in article 25 of the Regulation Safety Seagoing Vessels[β]	[1]	[1]	-	-	[1]	[1]	-
II.9.12	Orange Cross First aid booklet, last edition	-	-	1	-	-	1	-
II.9.13	Re-closable watertight kit, for all items in column R with an inventory and treatment instructions printed on waterproof material.	-	-	-	-	-	-	1

(1) In view of the danger of explosion associated with oxygen under pressure, appropriate storage is to be arranged for spare oxygen cylinders, preferably in the open air or in a ventilated space. The guidelines in Notices for Shipping No. 35/1965 (Acetylene welding and cutting installations, Dutch Government Gazette 169) should be followed as closely as possible.

(2) The stretcher shall have a framework with an inflexible supporting base and shall be constructed in such a way that the patient's complete body can be protected and immobilized, taking into account the wide range of circumstances under which the stretcher might be used. The stretcher is to be made of fire-resistant material and is to be provided with eyelets and belts for hoisting with a view to horizontal and vertical transportation, through, for example, scuttles and escape hatches. A stretcher is not required on board sailing vessels less than 24 metres in length.

[β] Regulation safety Seagoing vessels, art 25, second and third clause:
2. A Dutch copy of the Medical First Aid Guide for use in accidents involving dangerous goods (MFAG) determined by circular MSC/Circ.857 of the Maritime Safety Committee of the IMO is available on board of a ship carrying dangerous goods as referred to in Chapter VII of the SOLAS Convention.
3. An English copy instead of a Dutch copy of the Guide as referred to in the second clause, is available on board of ships on which the working language as referred to in provision V/14.3 of the SOLAS Convention is not Dutch.

Most significant changes with respect to medical supplies 2001

Table 1. Medicines
Cardiovascular
Removed:
Digoxine tabl. 0.25 mg has been removed, as this is meaningless without an ECG to hand. Furthermore, the most common side effects cannot be distinguished from underdosage, meaning that the medicine may not be administered by a layperson.
Furosemide tabl. 40 mg is removed. Blood pressure can be subtly regulated with this diuretic, but this must not be done on board. A beta-blocker is in fact sufficient. In the case of pulmonary oedema, a strong medicine must be used. Injectable furosemide is available for this, as detailed in 1.3.03.
Altered:
1.4.03: *Methylergometrine amp 0,2 ml/1 ml (im and sc injectable*) has been replaced by o*xytocine amp 5 U/1 ml*. This is due to methylergometrine's being a so-called 'controlled drug' and because oxytocine is more effective. A supply is necessary only when there are women on board.
1.5.01: *Nifedipine caps. 10 mg* has been replaced by 1.5.02 *metoprolol tabl. 50 mg.*
Metoprolol is now the standard treatment for (threatened) myocardial infarction, high blood pressure and increased heart rate (tachycardia). Due to this latter indication, it can replace digoxine in the treatment of atrial fibrillation.

Gastrointestinal system
Altered:
2.1.03: *Cimetidine tabl. 400 mg.* has been withdrawn. It has been replaced by 2.1.05, whereby o*meprazole tabl./caps. 20 mg* is prescribed. Omeprazole has for some years been the first-choice drug and has fewer side effects than cimetidine. The stock that was previously only recommended in column B is now mandatory, due to the frequency of stomach complaints.
2.2.02R: *Metoclopramide supp 20 mg.* Technical developments make it possible to extend the certification period in the case of some life rafts from a maximum of 12 months to a maximum of 30 months. The 2.2.02 *domperidone supp 60 mg* in column R of the medical provisions was found to have too short a shelf life. To allow for the extended certification period for lifeboats, life rafts and rescue vessels, domperidone is replaced by metoclopramide.
2.2.03: *Metoclopramide amp. 10 mg/2 ml (im injectable)* has been removed from columns B and E because domperidone suppositories are in general effective for treatment of serious nausea. The previously recommended stock of 5 in column A is now the mandatory stock, since the treatment of nausea can be of vital importance in the case of serious stomach complaints in global navigational areas.
2.3.01: *Lactulose syrup, bottle 300 ml.* The quantity of 1 bottle in column B and in the former column B-G is now no longer simply recommended, but also in the case of transport of dangerous goods, is now mandatory in column B. The reason for this is information from the Marine Radio Medical Assistance concerning frequent complaints of constipation in seafarers.

Nervous system
Altered:
4.1.02: *Diazepam microclyster 10 mg/2,5 ml.* Instead of the recommended stock of 5, 2 are now stipulated (so, mandatory) in column B. Although there is no alternative for treatment of an epileptic event, in view of the restricted navigational area, 2 suffice.
4.2.02: *Haloperidol amp 5 mg/1 ml (im and iv injectable)*. The recommended stock of 5 ampoules in the case of column B or the former column B-G is now replaced by a mandatory stock of 2 for column B, also in the case of transport of dangerous goods. This drug is necessary for the treatment of serious mental confusion, for example due to alcohol, but again, due to the restricted navigational area, 2 suffice.
4.5.01: *Temazepam tabl/caps 10 mg*. The recommended stock of 10 tablets or capsules for column B or the former column B-G is now mandatory for column B, also in the case of transport of dangerous goods. This is an inexpensive sleeping pill that easily interrupts the vicious circle of insomnia.

Respiratory system
Altered:
6.1.04: *Volumatic device to be used with 6.1.02 and 6.1.03*. The mandatory quantity in the former column E-G has now been corrected from 1 to 2 for column E for the transport of dangerous goods, arising from a typing error in the previous table.

Anti-infection
Removed:
Erythromycin tabl 500 mg. Erythromycin is stipulated in the MFAG (column A), but can be deleted since there are sufficient alternative antibiotics available. Erythromycin is used for, amongst other indications, treatment of (suspected) legionella infection, but Ciproxin is available for this. It is furthermore the second choice for persons allergic to penicillin. There are, however, sufficient alternatives available in this case.
Altered:
7.2.02: *Cotrimoxazole tabl 800+160 mg*. The quantity of 20 tablets previously stipulated in column A and the former column A-G has now been increased to 30 tablets in column A, also for transport of dangerous goods. The Radio Medical Assistance has reported shortage of medicines in the case of regularly occurring inflammation of the prostate.
7.7.02 + 7.7.03: *Proguanil tabl 100 g + choloroquine sulphate tabl 100 mg*. The quantities of both medicines have now been drastically reduced due to the fact that the combination of proguanil and chloroquine can no longer be recommended because of increased resistance, especially along the coast of West Africa. Proguanil must, however, still be kept on board for the prophylaxis of milder forms of malaria. Chloroquine is still needed for the treatment of less complicated, mild malaria.
7.7.05: *Malarone® tabl. 250/100 mg*. This is, in view of the above, now the first-choice medicine. Usage is limited to 4 consecutive weeks. More extended usage is possible only after the seafarer has signed a declaration of informed consent in the presence of a physician.

Compounds promoting rehydration, caloric intake and plasma expansion
Removed:
NaCl tabl 400 mg + coating glucose 100. This medicine is superfluous as long as the cook has been instructed to include more salt in food in the tropics. Salt shortage can be remedied with a bouillon and tomato juice with salt.
Altered:
8.1.01: *Oral Rehydration Salts. WHO-formula, sachet to give 1 liter rehydration solution*. The quantities are reduced in all columns due to advances in medical insight.
8.3.01: *Polygeline (Haemaccel) infusion, flac 500 ml.* This medicine is no longer included, but is replaced by a plasma substitute of choice. This is because Haemaccel is no longer available in the Netherlands. Also, improvements in AIDS prevention mean that infusion bottles need no longer be taken ashore. The quantities have therefore been reduced in columns A, B, D en E from 10, 5, 10max20 and 10 to 5, 3, 5max10 en 3, respectively.

Skin medicines
Altered:
9.1.03: *Chlorhexidine 0,5%, bottle 30 ml*. The recommended quantity of 2 in column B and the former column B-G is now mandatory in column B, also for the transport of dangerous goods, due to the discontinuation of Povidone-Iodine.
9.1.05: *Ethanol 70% based hand sanitizer*. Introduction of this substance is unavoidable in view of prevention of infection by SARS, etc.
9.1.08: *Betadine ointment, tube 50 g.* Tubes of 30 g are now stipulated, since the shelf life of such tubes is twice as long as those of 50 g.
9.1.10: *Miconazol nitrate cream 2%, tube 30 g.* The quantities recommended in column B and the former column B-G are now mandatory. The Radio Medical Assistance has indicated that this medicine is frequently needed for fungal infections of the skin.

9.1.13R: *Long-shelflife antiseptic cream suitable for treatment of burns.*
Technological advances have made possible the extension of the certification period for rescue vessels from a maximum of 12 months to a maximum of 30 months. It has become apparent that 9.1.13 *silver sulphadiazine cream 1%* in medical provisions column R has too short a shelf life. To permit the longer certification period, silver sulphadiazine cream is replaced for lifeboats, life rafts and rescue vehicles by *a long-shelflife antiseptic cream suitable for treatment of burns.*
9.1.15: *Alumnis compositum powder, can 100 g.* According to the Radio Medical Assistance, this talc is in frequent use for the prevention of skin complaints due to perspiration, and instead of being simply recommended, it is now mandatory. In view of the limited navigational area associated with column B and the former column B-G, one bottle will suffice.
9.1.18: *Lanette/menthol cream 2%, tube 10 g.* 1 tube was recommended for column B and the former column B-G. The Radio Medical Assistance has, however, indicated that this preparation is very seldom used, and for the new column B nothing is dictated or recommended.
9.1.20: *Permethrin lotion 1%, bottle. 59 ml*. The recommended quantity of 1 is now mandatory following the advice of the Radio Medical Assistance, which employs this preparation for the treatment of regularly occurring contagion by lice or scabies.
9.2.04: *Pilocarpine eye drops 1%, dropper bottle. 10 ml.* De 1% eye drops are no longer available, and for this reason 2% is stipulated.
9.2.06: *Tetracycline ointment 1%, 4g.* The polymyxine stipulated previously is also no longer available and has therefore been replaced by tetracycline in the table.

Table 2. Equipment
Dressing and suturing equipment
Removed:
Tubular gauze bandage for finger dressings with applicator. This is deleted from column R. It does not belong in the real first-aid equipment and its use is too complex in an actual survival situation. There are alternative solutions to hand.
Waterjel burn dressing 20x46 cm. This is no longer stipulated. Cooling with water is standard treatment.

Instruments
Altered:
II.3.01: *Scalpel sterile disposable*. A quantity of 3 was a recommendation for column B and the former column B-G. The scalpel must be included in the mandatory suture kit in II.2.01.
II.3.07: *Razor disposable*. Two razors were also only a recommendation for column B and the former column B-G. A razor is now mandatory in column B, also for the transport of dangerous goods, in view of the mandatory provision of a suture kit in II.2.01.
Removed:
Eyecup for irrigation (plastic)). This equipment is deleted. Although splashes or specks of dirt are probably quite common at sea, flushing under a lukewarm shower or with lukewarm water from a PET bottle is more effective than using an eye bath.
*Gastric tube Ch 21***.** This equipment is deleted because its wrong positioning (in the lung) can cause extensive injury.

Examination and monitoring equipment
Altered:
II.4.03: *Temperature/pulse charts*. Five sheets were recommended in column B. However, in case of sickness, temperature and pulse must always be recorded. This equipment is therefore now mandatory.
II.4.09: *Penlight type flashlight + blue cover*. One (column A) or two (column B) of these was the recommendation for diagnosis of specks in the eye. The Radio Medical Assistance has reported that this is a frequently occurring complaint, which is reason enough to make this apparatus, in the same quantities, compulsory.

Equipment for injection, perfusion, puncture and catherization
Removed:
Disposable filter infuser. This apparatus is deleted in view of the improved situation regarding prevention of AIDS.
Citrate-containing blood collecting bags. This equipment is deleted in view of the improved situation regarding prevention of AIDS. The equipment is furthermore expensive and has a relatively short shelf life.
Altered:
II.5.06: *Catheter sterile Thieman no. 16* is replaced by catheter sterile Thieman, without balloon, Nos. 12 and 16. Furthermore, the prescribed quantities have been adjusted. The change is due to the fact that injudicious use of a catheter with balloon can cause injury. No. 16 is for use only in men; No. 12 is an average dimension for women.

Immobilization and setting equipment
Altered:
II.7.03: *Inflatable splints assorti*. Inflatable splits are these days not recommended due to observed circulatory system complications. Instead of these, vacuum splits are to be used (half/whole arm, half/whole leg), with a hand pump.

Disinfection, disinsectization and prophylaxis
Altered:
II.8.01: *Chloramine T (Halamid) 25% free chlorine, sachet 25 g.* This substance is replaced by "a disinfectant for drinking water suitable for human consumption" in sufficient quantity to disinfect the complete on-board water supply in one application.
II.8.03: Insecticide Cyflutrin 9%, packet cont. 5 sachets 20 mg. The Cyflutrin packaging warns that only suitably trained persons must use the insecticide. Since seafarers do not satisfy this condition, this substance is replaced by "a sprayable pesticide of choice, effective against flying and creeping insects, bottle".

Miscellaneous
Removed:
Plastic bag for preservation of amputated parts of the body. This equipment is deleted, since an ordinary plastic bag suffices.
Altered:
II.9.03: *Condoms.* The recommended quantity of 20 condoms in column B and the former column B-G is now given as mandatory in column B. There is a general increase in sexually transmitted diseases (STDs) and HIV through reduced condom usage.

List of NSI approved stretchers, state of affairs 16 July 2006

A certificate of approval from the Netherlands Shipping Inspectorate is no longer required for stretchers.
The same degree of safety must obviously be maintained.
Statutory requirements are specified in the regulation. They roughly cover the conditions on which a certificate of approval was issued previously. A list of formerly certified stretchers is given.

Approval issued to	Brand and type	Producer	Certificate	Valid until	Remarks
Vandeputte Medical BV Galvanibaan 1-3 Postbus 1533 3430 BM NIEUWEGEIN 030-6005150	Mevra Type DMV	Mevra BV Nieuwegein	DS/475/2002-2.2.8 issued 11-01-2002	11-01-2007	Formerly Ferno Washington Kuipbrancard (model 71 special)
	www.vandeputtemedical.com > Shop > Transport- & reddingsmateriaal > > Reddingsbrancards > 15471				
Datema Delfzijl BV Hogelandsterweg 8 Postbus 101 9930 AC DELFZIJL 0596-635252	SRS Type Datema-SRSII	Soen BV Lepeler, België	DS./200160/2003-2.2.8 issued 10-02-2003	10-02-2008	Formerly: Date-Mate-SRSII
	Datema-FORS	Soen BV Lepeler, België	DS/4608/2001-2.2.8 issued 20-11-2001	20-11-2006	Foldable
Trelleborg Industri AB Dragongatan 18 P.O. Box 1520 S-27100 YSTAD, Zweden +46-411-67940	Paramedics Rescue Pac MKII		SI/1542/2000 issued 05-07-2000	01-07-2005	Foldable

List of NSI approved oxygen sets, state of affairs 16 July 2006

A certificate of approval from the Netherlands Shipping Inspectorate is no longer required for oxygen giving sets. Statutory requirements are specified in the regulation. They roughly cover the conditions on which a certificate of approval was issued previously. A list of formerly certified oxygen giving sets is given.

Approval issued to	Brand and type	Producer	Certificate	Valid until	Remarks
Datema Delfzijl BV Hogelandsterweg 8 Postbus 101 9930 AC DELFZIJL 0596-635252	Datema NSI	Vandeputte BV Nieuwegein	DS/11123/2002-2.2.1 issued 23-07-2002	01-08-2007	
Dräger Nederland BV Edisonstraat 53 Postbus 310 2700 AH ZOETERMEER	RSI	Dräger Nederland BV Zoetermeer	SI/4/96-2.2.1 issued 13-03-1996	01-04-2001 EXPIRED	
	OSI	Dräger Nederland BV Zoetermeer	SI/3/96-2.2.1 issued 13-03-1996	01-04-2001 EXPIRED	
Metemij BV Postbus 149 1110 AC DIEMEN	Weinmann Type Scheepvaartmodel 1	Weinmann Hamburg, Duitsland	DS/3743/2003-2.2.1 issued 14-04-2003	14-04-2008	
	Weinmann Type Scheepvaartmodel 2	Weinmann Hamburg, Duitsland	DS/6765/2003-2.2.1 issued 14-04-2003	14-04-2008	With automatic respirator
Kostabo Ship Service Hoogstraat 16 A 8861 AG HARLINGEN	Kostabo oxygen respiratory kit NSI-1	Kostabo Harlingen	DS/6766/2003-2.2.1 issued 28-03-2003	28-03-2008	

Notices for Shipping 35/1965 Acetylene welding and cutting installations

De Inspecteur-Generaal voor de Scheepvaart,
Overwegende:
dat vele schepen voor het aan boord verrichten van reparatiewerkzaamheden zijn uitgerust met een acetyleen las- en snij-installatie;
dat gebleken is dat de opstelling van de hiervoor nodige acetyleen- en zuurstofflessen en de aanleg van de zuurstof- en de acetyleenleidingen enz niet altijd voldoen aan de eisen welke daaraan met het oog op de veiligheid dienen te worden gesteld;
dat het derhalve nodig is terzake voorschriften vast te stellen:
Gelet op: het bepaalde in de artikelen 56. zevende lid, en 174 van het Schepenbesluit 1965:

Maakt bekend:

dat een acetyleen las- en snij-installatie niet aan boord van een schip mag worden geplaatst voordat de voorgenomen opstelling en uitvoering daarvan door of namens hem zijn goedgekeurd:

dat hiertoe de nodige tekeningen en schema¿s waaruit de plaats en de wijze van opstelling en aansluiting van acetyleen- en zuurstofflessen, appendages, leidingen enz. duidelijk blijken, tijdig bij de Scheepvaartinspectie moeten worden ingediend;

dat bij de opstelling en inrichting van een acetyleen las- en mij-installatie het volgende in acht moet worden genomen:
1. het gebruik van acetyleen-gas-ontwikkelaars is verboden;
2. acetyleen- en zuurstofflessen moeten op het open dek dan wel in besloten ruimten, geen werkruimten zijnde, die door middel van een deur in directe verbinding staan met het open dek. verticaal worden opgesteld;
3. acetyleen- en zuurstofflessen mogen niet tezamen in dezelfde besloten ruimte zijn ondergebracht;
4. de flessen moeten goed beschermd en zeevast zijn opgesteld en mogen niet kunnen zijn blootgesteld aan directe straling van de zon of aan uitstralende warmte van machinekamer- of ketelschachten. kombuizen en dergelijke:
5. acetyleen- of zuurstofflessen mogen niet in of onder accommodatieruimten voor passagiers en bemanning worden geplaatst:
6. een besloten ruimte als onder 2 bedoeld moet omgeven zijn door gasdichte stalen schotten en afgesloten kunnen worden door een naar buiten draaiende stalen deur met vonkvrij sluitwerk: deze ruimte mag niet op enige wijze in verbinding staan met andere besloten ruimten en moet goed worden geventileerd door luchtaanvoer in het bovendeel en afvoer naar de buitenlucht ter hoogte van de vloer:
7. op de deur van een ruimte, waarin acetyleenflessen zijn opgesteld, moet zowel aan de binnen- als aan de buitenzijde duidelijk leesbaar zijn aangegeven:

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8. besloten ruimten waarin acetyleenflessen zijn ondergebracht mogen niet worden gebruikt voor opstelling of berging van werktuigen, toestellen of materialen die tot vonkvorming aanleiding kunnen geven: de flessen moeten te allen tijde snel uit deze ruimten kunnen worden verwijderd;
9. besloten ruimten waarin zuurstofflessen zijn ondergebracht moeten volkomen vet- en olievrij worden gehouden en mogen niet worden gebruikt voor berging van stoffen die gemakkelijk tot ontbranding kunnen komen indien een overmaat van zuurstof aanwezig is: de flessen moeten te allen tijde snel uit deze ruimten kunnen worden verwijderd:
10. de verlichting van ruimten waarin acetyleenflessen zijn ondergebracht moet voldoen aan de voorschriften vervat in het eerste en zesde lid van artikel 13 van bijlage VlI van het Schepenbesluit 1965:
11. nabij de plaats of ruimte waar acetyleenflessen hetzij permanent hetzij tijdelijk zijn opgesteld moet een goedgekeurde koolzuursneeuwblusser of droogpoederblusser aanwezig zijn: in de nabijheid moet zich voorts een brandblusafsluiter met brandslang, koppelingen en straalpijp bevinden, dan wel boven de flessen een op afstand bedienbare watersproei-inrichting zijn aangebracht:
12. op de afsluiter van elke in gebruik zijnde acetyleen-ofzuurstoffles moet steeds een sleutel zijn aangebracht, zodat de afsluiter in noodgevallen onmiddellijk en snel kan worden gesloten:
13. het leidingsysteem voor acetyleen zowel als voor zuurstof moet bestaan uit een vast aangebrachte hogedruk verzamelleiding, waarop de fles of de flessen door middel van een buigzame hogedrukleiding met afsluiter is of zijn

aangesloten: deze verzamelleidingen moeten zo kort mogelijk zijn (zie publicatie P. nr. 14 van de Arbeidsinspectie onder punt 1.4.5);
14. door middel van een vast aangebrachte lagedruk distributieleiding moet het gas met een gereduceerde druk naar de werkplaats worden gevoerd: deze gereduceerde druk mag voor acetyleen ten hoogste 1 kg/cm2 bedragen en voor zuurstof ten hoogste 20 kg/cm2;
15. elke distributieleiding moet met een afsluiter op de hogedruk verzamelleiding zijn aangesloten; tegen deze afsluiter moet het reduceertoestel. dat de gasdrukken reduceert tot de onder 14 aangegeven drukken, worden aangebracht;
16. aan het eind van een distributieleiding moeten wederom achtereenvolgens een afsluiter worden aangebracht en een reduceertoestel, dat de druk in de slangen naar de las- of snijbrander reduceert tot die, waarmede de brander gebruikt mag worden:
17. vóór en achter het in punt 15 genoemde en achter het in punt 16 genoemde reduceertoestel moet een goed zichtbare manometer zijn aangebracht; de druk van een reduceertoestel moet gemakkelijk instelbaar zijn: de Bourdonveer van de manometers in acetyleenleidingen moet zijn vervaardig van roestvrij staal of nikkel; de wijzerplaat van deze manometers moet zijn voorzien van de aanduiding `Geschikt voor acetyleen`.
18. acetyleen-en zuurstofleidingen mogen niet door hutten, andere verblijven en kombuizen lopen; zij moeten zodanig zijn geverfd. dat zij gemakkelijk kenbaar zijn en niet door ruimten zijn aangelegd waar zij aan het oog zijn onttrokken;
19. acetyleenleidingen moeten zijn vervaardigd van naadloos getrokken staal; in het leidingsysteem of de zich daarin bevindende afsluiters en appendages mag het acetyleengas niet in aanraking kunnen komen met koper of koperlegeringen met een kopergehalte van meer dan 63%:
20. hogedruk zuurstofleidingen moeten zijn vervaardigd van naadloos getrokken koper; distributieleidingen mogen zijn vervaardigd van naadloos getrokken staal:
21. hogedruk acetyleen- en zuurstofleidingen moeten na montage geperst worden op een drukvan respectievelijkten minste 180 kg/cm2 en 300 kg/cm2; vast aangebrachte lagedrukacetyleen en zuurstofleidingen op een drukvan 30 kg/cm2;
22. voor de verbinding van vast aangebrachte acetyleen- en zuurstofleidingen mag uitsluitend gebruik worden gemaakt van hogedruk koppelingen: ook deugdelijk gelaste verbindingen zijn toegelaten;
23. vóór de eerste ingebruikneming moeten de zuurstofleidingen grondig worden ontvet en worden doorgeblazen met zuurstof; acetyleenleidingen moeten worden doorgeblazen met een inert gas (stikstof of koolzuur);
24. acetyleen- en zuurstofslangen voor las- of snijbranders moeten van goede oliebestendige kwaliteit zijn en op de aansluitstukken worden vastgezet met deugdelijke klemmen:
25. nabij elke brander moet in de acetyleenslang en deugdelijke vlamdover zijn aangebracht;
26. voor een enkelvoudige lasinstallatie, waarin steeds slechts één acetyleen- en één zuurstoffles tegelijk in gebruik zijn en de las- of snijwerkzaamheden in de nabijheid van de plaats der flessen worden verricht, behoeft aan de in de punten 13, 14, 15 en 16 gegeven voorschriften niet te worden voldaan; alsdan mogen de acetyleen- en zuurstofslangen rechtstreeks op de reduceertoestellen der flessen worden aangesloten:

dat voorts de aanwijzingen voor de inrichting, de opstelling en het gebruik van acetyleen- en zuurstofflessen, en die voor het gebruik en het onderhoud van acetyleen las- en snijgereedschap, opgenomen in de nieuwste Publicaties van de Arbeidsinspectie P. nr. 7, 14 en 17 zoveel mogelijk in acht moeten worden genomen: in het bijzonder wordt de aandacht gevestigd op punt 2.10 van Publicatie P. nr. 7;

dat genoemde publicaties aan boord van elk schip, uitgerust met een acetyleen las- en snij-installatie, aanwezig moeten zijn en aan personen die met werkzaamheden met deze installatie worden belast tevoren ter kennisneming moeten worden verstrekt;

dat met autogene las- en snijwerkzaamheden alleen mogen worden belast personen die daarmede voldoende bekend zijn:

dat voorts ter plaatse waar de las- en snijwerkzaamheden als regel worden verricht een bord dient te worden aangebracht waarop duidelijk leesbaar de samenvatting is aangegeven van de belangrijkste aanwijzingen en veiligheidsmaatregelen, zoals deze is opgenomen onder 11*) van de Publicatie P. nr. 17 van de Arbeidsinspectie.

`s-Gravenhage, 3 september 1965
De lnspecteur-Generaal voornoemd,