

2.2.3.2 ASBESTOS

Structure and / or equipment	Component	
Propeller shafting	<ul style="list-style-type: none"> Packing with low pressure hydraulic piping flange Packing with casing Clutch 	<ul style="list-style-type: none"> Brake lining Synthetic stern tubes
Diesel engine	<ul style="list-style-type: none"> Packing with piping flange Lagging material for fuel pipe 	<ul style="list-style-type: none"> Lagging material for exhaust pipe Lagging material turbocharger
Turbine engine	<ul style="list-style-type: none"> Lagging material for casing Packing with flange of piping and valve for steam line, exhaust line and drain line Lagging material for piping and valve for steam line, exhaust line and drain line 	
Boiler	<ul style="list-style-type: none"> Packing with flange of piping and valve for steam line, exhaust line and drain line Lagging material for piping and valve for steam line, exhaust line and drain line Gas shield packing for soot blower and other hole Insulation in combustion chamber Packing for casing door 	
Exhaust gas economizer	<ul style="list-style-type: none"> Packing with flange of piping and valve for steam line, exhaust line and drain line Lagging material for piping and valve for steam line, exhaust line and drain line Packing for casing door Packing with manhole 	
Incinerator	<ul style="list-style-type: none"> Packing for casing door Packing with manhole 	
Auxiliary machinery (pump, Compressor, oil purifier, crane)	<ul style="list-style-type: none"> Packing for casing door Gland packing 	<ul style="list-style-type: none"> Packing with hand hole Gas shield packing for soot blower
Heat exchanger	<ul style="list-style-type: none"> Packing for casing door and valve Gland packing for valve 	<ul style="list-style-type: none"> Lagging material and insulation
Valve	<ul style="list-style-type: none"> Gland packing with valve, sheet packing with piping flange Gasket with flange of high pressure and/or high temperature 	
Pipe, duct	<ul style="list-style-type: none"> Lagging material and insulation 	
Tank (fuel, hot water, tank, condenser), other equipments (fuel strainer, lubricant oil strainer)	<ul style="list-style-type: none"> Lagging material and insulation 	
Electric equipment	<ul style="list-style-type: none"> Insulation material 	
Airborne asbestos	<ul style="list-style-type: none"> Wall, ceiling 	
Ceiling, floor and wall in accommodation area	<ul style="list-style-type: none"> Ceiling, floor, wall 	
Fire door	<ul style="list-style-type: none"> Packing, construction and insulation of the fire door 	
Inert gas system	<ul style="list-style-type: none"> Packing for casing, etc 	
Air-conditioning system	<ul style="list-style-type: none"> Sheet packing, lagging material for piping and flexible joint 	
Miscellaneous:	<ul style="list-style-type: none"> Ropes Thermal insulating Fire shields / fire proofing Space / duct / insulation Electrical cable materials Brake linings Floor tiles/deck underlay Steam / water / vent flange gaskets Sound damping 	<ul style="list-style-type: none"> Moulded plastic products Sealing putty Shaft/valve packing Electrical bulkhead penetration packing Circuit breaker arc chutes Pipe hanger insert Weld shop protectors / burn covers Fire-fighting blank/clothing equipm. Concrete ballast

2.2.3.3 POLYCHLORINATED BIPHENYL (PCBs)

Equipment	Component of equipment
Transformer	<ul style="list-style-type: none"> Insulating oil
Condenser	<ul style="list-style-type: none"> Insulating oil
Fuel heater	<ul style="list-style-type: none"> Heating medium
Electric cable	<ul style="list-style-type: none"> Covering, insulating tape
Lubricating oil	
Heat Oil	<ul style="list-style-type: none"> Thermometers, sensors, indicators
Rubber / felt gaskets	
Rubber hose	
Plastic foam insulation	
Thermal insulating materials	
Voltage regulators	
Switches / reclosers / bushings	
Electromagnets	
Adhesives / tapes	
Surface contamination of machinery	
Oil-based paint	
Caulking	
Rubber isolation mounts	
Pipe hangers	
Light ballast (component within fluorcent light fixtures)	
Plasticizers	
Felt under septum plates on top of hull bottom	

2.2.3.4 OZONE DEPLETING SUBSTANCES (ODS)

Equipment	Component of equipment	Period for use of ODS in Japan
CFCS (R11, R12)	Refrigerant for refrigerators	Until 1996
CFCs	Urethane formed materials	Until 1996
Halons	Extinguishing agent	Until 1994
Other fully halogenated CFCs	The possibility of usage in ships is low	Until 1996
Carbon tetrachloride	The possibility of usage in ships is low	Until 1996
1.1.1-Trichloroethane (Methyl Chloroform)	The possibility of usage in ships is low	Until 1996
HCFC (R22, R141b)	Refrigerant for refrigerating machine	It is possible to use it until 2020
HBFC	The possibility of usage in ships is low	Until 1996
Methyl bromide	The possibility of usage in ships is low	Until 1996

2.2.3.5 ORGANOTIN COMPOUNDS

Organotin compounds Organotin compounds include tributyl tins (TBT), triphenyl tins (TPT) and tributyl tin oxide (TBTO). Organotin compounds have been used as anti-fouling paint on ships' bottoms and the International Convention on the Control of Harmful Anti-Fouling Systems on Ships (AFS Convention) stipulates that all ships shall not apply or re-apply organotin compounds after 1 January 2003, and that, after 1 January 2008, all ships shall either not bear such compounds on their hulls or shall bear a coating that forms a barrier preventing such compounds from leaching into the sea. The above-mentioned dates may have been extended by permission of the Administration bearing in mind that the AFS Convention entered into force on 17 September 2008.

2.2.4. MATERIALS LISTED IN TABLE B

For existing ships it is not obligatory for materials listed in table B to be listed in Part I of the Inventory. However, if they can be identified in a practical way, they should be listed in the Inventory, because the information will be used to support ship recycling process. For new vessel with an Inventory in place it will be mandatory to maintain Table B materials. (Clean Design requirements)

Materials	Component of equipment	
Cadmium and cadmium compound	<ul style="list-style-type: none"> nickel-cadmium battery bearing 	<ul style="list-style-type: none"> plating film
Hexavalent chromium	<ul style="list-style-type: none"> plating film 	
Mercury and mercury compounds	<ul style="list-style-type: none"> fluorescent light mercury lamp mercury cell pressure sensors electrical switches fire detectors 	<ul style="list-style-type: none"> liquid-level switch gyro compass thermometer measuring tool manganese cell light fittings
Lead and lead compounds	<ul style="list-style-type: none"> lead-acid storage battery solder (almost all electric appliances contain solder) cable insulation generators 	<ul style="list-style-type: none"> corrosion-resistant primer paints preservative coatings lead ballast
Polybrominated biphenyls (PBBs)	<ul style="list-style-type: none"> non-flammable plastic 	
Polybrominated diphenyl ethers (PBDE)	<ul style="list-style-type: none"> non-flammable plastics 	
Polychlorinated naphthalenes	<ul style="list-style-type: none"> paint 	<ul style="list-style-type: none"> lubricating oil
Radioactive substances	<ul style="list-style-type: none"> fluorescent paint level gauge 	<ul style="list-style-type: none"> Ionic smoke detector
Certain shortchain chlorinated paraffins	<ul style="list-style-type: none"> non-flammable 	