AMMONIUM PERCHLORATE

Special Emergency Equipment to be carried

Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear self-contained breathing apparatus when dealing with FIRE.

EMERGENCY ACTION

On deck

Under deck

SPILLAGE Keep spillage wet. Wash

spillage overboard with copious quantities of water.

Keep spillage wet.
Collect spillage, where
practicable, in plastics
receptacles for safe disposal.

FIRE

If possible remove receptacles likely to be involved in a fire or keep them cool with copious quantities of water. If the fire reaches the substance, risk of mass explosion arises. In such a case abandoning ship should be considered.

Adopt action as for "On deck".

First Aid - See IMO Medical First Aid Guide (MFAG)

EMERGENCY SCHEDULE 5.1-10

OXIDIZING SUBSTANCES CARRIED IN A MOLTEN STATE; STOWAGE "ON DECK ONLY"

Special Emergency Equipment to be carried

Full protective clothing (gloves, boots, coveralls, headgear, goggles). Self-contained breathing apparatus.

EMERGENCY PROCEDURES

Wear full protective clothing when dealing with SPILLAGE. Wear protective clothing and self-contained breathing apparatus when dealing with FIRE.

EMERGENCY ACTION

On deck

Under deck

SPILLAGE Wash spillage overboard

using copious quantities of

Not applicable.

water.

FIRE

Use copious quantities of

Not applicable.

water from as far away as

practicable.
In case of a major fire or a decomposition, drain the tank and jettison the contents. If possible open the manhole

covers of the tank.

FMERGENCY SCHEDULE 5.1-11

OXIDIZING SUBSTANCES, NOT OTHERWISE SPECIFIED

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus. Inert absorbent material (e.g. diatomaceous earth).

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

Turn ship off wind. Some substances may explode in a fire situation.

On deck

Under deck

SPILLAGE Wash spillage overboard with copious quantities of water from as far away as practicable. Contaminated clothing must be removed and washed carefully with copious quantities of water.

Collect spillage, where practicable, using inert absorbent material for liquids. for safe disposal. Do not repack.

Do not use sawdust or other combustible materials as absorbents.

Contaminated clothing must be removed and washed carefully with copious quantities of water.

FIRE

Use copious quantities of water from as far away as practicable. Remove receptacles likely to be involved or keep them cool with copious quantities of water.

Ship's fixed fire-fighting installation may not be effective. Adopt action as for

"On deck".

First Aid - See IMO Medical First Aid Guide (MFAG)

EMERGENCY SCHEDULE 5 2-01

ORGANIC PEROXIDES IN PACKAGINGS; STOWAGE "ON DECK ONLY"

Special Emergency Equipment to be carried

Protective gloves, boots and goggles. Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear protective gloves, boots and goggles when dealing with SPILLAGE and, additionally, self-contained breathing apparatus when dealing with SMOKE **EVOLUTION or FIRE.**

EMERGENCY ACTION

Avoid all sources of ignition (e.g. naked lights, unprotected light bulbs, electric handtools).

On deck

Under deck

SPILLAGE

SMOKE

EVOLUTION

Wash overboard with copious quantities

Not applicable.

of water.

Dispose of leaking packages.

Turn ship off wind. Cool down packages or freight container using copious

Not applicable

Not applicable

quantities of water from a protected

position.

Contact the manufacturer.

Do not open freight container until well after smoke evolution has ceased. Cool down smoking and bulged packages with water. Dispose of bulged or leaking

packages and residues.

FIRE

Use water spray from a protected position, as far away as practicable. Do NOT use water jet. Keep surrounding areas cool with copious quantities of water. Contact the manufacturer. After the fire has been extinguished the freight container may be approached. If possible, keep contents cool with copious

quantities of water for several hours. Dispose of residues if practicable.

Clean the area thoroughly.

ORGANIC PEROXIDES, TEMPERATURE CONTROLLED, IN PACKAGINGS; STOWAGE "ON DECK ONLY"

Special Emergency Equipment to be carried

Protective gloves, boots and goggles. Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear protective gloves, boots and goggles when dealing with SPILLAGE and, additionally, self-contained breathing apparatus when dealing with SMOKE **EVOLUTION** or FIRE.

EMERGENCY ACTION

Avoid all sources of ignition (e.g. naked lights, unprotected light bulbs, electric

	handtools). Check temperature reading if possible.		
		On deck	Under deck
	SPILLAGE	Leave freight container closed. Wash spillage overboard with copious quantities of water.	Not applicable
	TEMPERATURE INCREASE	If the control temperature is exceeded, the refrigeration unit has to be inspected (consult manual). Log the temperature frequently. If the temperature control cannot be restored, the manufacturer should be consulted. When smoke is observed, follow guidelines for smoke evolution. If the emergency temperature is reached and no smoke is observed, the packages should be taken one by one and directly lowered over the side of the ship.	Not applicable
	SMOKE EVOLUTION	Turn ship off wind. Contact the manufacturer as soon as possible. The freight container should not be approached until well after smoke evolution has ceased. Check refrigeration system. Follow guidelines for temperature increases.	Not applicable
The second secon	FIRE	Use water spray from a protected position, as far away as practicable. Do NOT use water jet. Contact the manufacturer as soon as possible. After the fire has been extinguished, the freight container should be kept under surveillance.	Not applicable

First Aid – See IMO Medical First Aid Guide (MFAG)

EMERGENCY SCHEDULE 5.2-03

ORGANIC PEROXIDES IN IBCs: STOWAGE "ON DECK ONLY"

Special Emergency Equipment to be carried

Protective gloves, boots and goggles. Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear protective gloves, boots and goggles when dealing with SPILLAGE and, additionally, self-contained breathing apparatus when dealing with SMOKE **EVOLUTION** or FIRE.

EMERGENCY ACTION

Avoid all sources of ignition to a naked lights uppretented light bulbs, electric

Avoid all sourchandtools).	Avoid all sources of ignition (e.g. naked lights, unprotected light bulbs, electric handtools).	
	On deck	Under deck
SPILLAGE	Stop leak if practicable. Wash spillage overboard with copious quantities of water.	Not applicable
SMOKE EVOLUTION	Turn ship off wind. Cool down freight container using copious quantities of water from a protected position. Contact the manufacturer. Do not open freight container until well after smoke evolution has ceased.	Not applicable
FIRE	Use water spray from a protected position, as far away as practicable. Do NOT use water jet. Keep surrounding areas cool with copious quantities of water. Contact the manufacturer. After the fire has been extinguished, the freight container may be approached. If possible, keep contents cool with copious quantities of water for several hours. Dispose of residues if practicable. Clean the area thoroughly.	Not applicable

ORGANIC PEROXIDES IN IBCs, TEMPERATURE CONTROLLED; STOWAGE "ON DECK ONLY"

Special Emergency Equipment to be carried

Protective gloves, boots and goggles. Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear protective gloves, boots and goggles when dealing with SPILLAGE and, additionally, self-contained breathing apparatus when dealing with SMOKE **EVOLUTION** or FIRE.

EMERGENCY ACTION

Avoid all sources of ignition (e.g. naked lights, unprotected light bulbs, electric handtoole) Chock tomporature reading if pescible

handtools). Check temperature reading if possible.		
	On deck	Under deck
SPILLAGE	Wash spillage overboard with copious quantities of water. Doors of freight containers may be opened briefly to stop leak if practicable.	Not applicable
TEMPERATURE INCREASE	If the control temperature is exceeded, the refrigeration unit has to be inspected (consult manual). Log the temperature frequently. If the temperature control cannot be restored, the manufacturer should be consulted. If the emergency temperature is reached, the doors may be opened. When smoke is observed, follow guidelines for smoke evolution.	Not applicable
SMOKE EVOLUTION	Turn ship off wind. Contact the manufacturer as soon as possible. The freight container should not be approached until well after smoke evolution has ceased. Check refrigeration system. Inspect the contents of the freight container briefly and leave the doors open if the damage is substantial. Keep the freight container under surveillance.	Not applicable
FIRE	Use water spray from a protected position, as far away as practicable. Do NOT use water jet. Contact the manufacturer as soon as possible. After the fire has been extinguished, the freight container should be kept under surveillance.	Not applicable

First Aid - See IMO Medical First Aid Guide (MFAG)

EMERGENCY SCHEDULE 5.2-05

ORGANIC PEROXIDES IN TANKS; STOWAGE "ON DECK ONLY"

Special Emergency Equipment to be carried

Protective gloves, boots and goggles. Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear protective gloves, boots and goggles when dealing with SPILLAGE and, additionally, self-contained breathing apparatus when dealing with SMOKE EVOLUTION or FIRE.

	EMERGENCY ACTION		
Avoid all sourd handtools).	Avoid all sources of ignition (e.g. naked lights, unprotected light bulbs, electric handtools).		
	On deck	Under deck	
SPILLAGE	Stop leak if practicable. Wash spillage overboard with copious quantities of water.	Not applicable	
SMOKE EVOLUTION	Turn ship off wind. Keep area isolated as fluid ejection from bursting disc(s) might take place. Cool down tank with copious quantities of water from a protected position. Contact the manufacturer as soon as possible. Even when smoke evolution has ceased, cooling of the tank should be continued until the temperature of the contents is below 50°C. After this, the tank may be inspected and repaired if practicable. Check the temperature of the contents frequently and cool tank with copious quantities of water if temperature increases.	Not applicable	
FIRE	Keep area isolated as fluid ejection from bursting disc(s) might take place. Use water spray from a protected position to extinguish the fire. Contact the manufacturer as soon as possible. Cooling of the tank should be continued until the temperature of the contents is below 50°C. Inspect and repair tank if practicable. Check	Not applicable	

First Aid - See IMO Medical First Aid Guide (MFAG)

temperature frequently and cool with copious quantities of water when necessary.

ORGANIC PEROXIDES IN TANKS, TEMPERATURE CONTROLLED; STOWAGE "ON DECK ONLY"

Special Emergency Equipment to be carried

Protective gloves, boots and goggles. Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear protective gloves, boots and goggles when dealing with SPILLAGE and, additionally, self-contained breathing apparatus when dealing with SMOKE EVOLUTION or FIRE.

EMERGENCY ACTION

Avoid all sources of ignition (e.g. naked lights, unprotected light bulbs, electric handtools). Check temperature reading if possible.

	On dook	Under deck
	On deck	Under deck
SPILLAGE	Stop leak if practicable. Wash spillage overboard with copious quantities of water.	Not applicable
TEMPERATURE INCREASE	If the control temperature is exceeded, the refrigeration unit has to be inspected (consult manual). Log the temperature frequently. If temperature control cannot be restored, the manufacturer should be consulted. If the emergency temperature is reached, the tank has to be isolated. When smoke is observed, follow guidelines for smoke evolution.	Not applicable
SMOKE EVOLUTION	Turn ship off wind. Keep area isolated as fluid ejection from bursting disc(s) might take place. Direct water spray from a protected position at the smoke. Consult the manufacturer as soon as possible. Even when smoke evolution has ceased, water spray should be continued for some hours as new smoke evolution might take place.	Not applicable
FIRE	Keep area isolated as fluid ejection from bursting disc(s) might take place. Use water spray from a protected position, as far away as possible. Contact the manufacturer as soon as possible. Even when fire has been extinguished, water spray should be continued for some hours as smoke evolution might still take place.	Not applicable

First Aid - See IMO Medical First Aid Guide (MFAG)

CLASS 6

EMERGENCY SCHEDULE 6.1-01

TOXIC LIQUIDS, INCLUDING SUBSTANCES WHICH MAY LIQUEFY DURING TRANSPORT, FLAMMABLE, FLASHPOINT 61°C c.c. OR BELOW

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

Avoid all sources of ignition (e.g. naked lights, unprotected light bulbs, electric handtools). Turn ship off wind.

	On deck	Under deck
SPILLAGE	Collect spillage, where practicable, using absorbent material for safe disposal. Wash remainder overboard with copious quantities of water.	Provide adequate ventilation. Collect spillage, where practicable, using absorbent material, for safe disposal.
FIRE ,	Use water spray. Do NOT use water jet. If possible remove receptacles likely to be involved or keep them cool with copious quantities of water.	Batten down; use ship's fixed fire-fighting installation. Otherwise adopt action as for "On deck".

First Aid - See IMO Medical First Aid Guide (MFAG)

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UN No.	Substance or Article	Remarks
1051	HYDROGEN CYANIDE, ANHYDROUS, STABILIZED	Spillage may be gaseous.
1259	NICKEL CARBONYL	Possible self-ignition at high ambient temperatures.
1577	CHLORODINITROBENZENES, LIQUID or SOLID	
1597	DINITROBENZENES, LIQUID	In fire, explosion hazard.
1600	DINITROTOLUENES, MOLTEN	<i>)</i> .
1614	HYDROGEN CYANIDE, ANHYDROUS, STABILIZED, absorbed in a porous inert material	Spillage may be gaseous.
1994	IRON PENTACARBONYL	Possible self-ignition at high ambient temperatures.
2038	DINITROTOLUENES, LIQUID	In fire, explosion hazard.

TOXIC LIQUIDS, INCLUDING SUBSTANCES WHICH MAY LIQUEFY DURING TRANSPORT, NOT COVERED BY OTHER SCHEDULES

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus.

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

Turn ship off wind.

On deck

SPILLAGE Collect spillage, where practicable, using absorbent material for safe disposal. Wash remainder overboard with copious quantities of water.

FIRE Use copious quantities of water or other media to fight

fire. If possible remove receptacles likely to be involved or keep them cool with copious quantities of water.

Otherwise adop for "On deck".

Under deck

Provide adequate ventilation. Collect spillage, where practicable, using absorbent material, for safe disposal.

Batten down, use ship's fixed fire-fighting installation. Otherwise adopt action as for "On deck"

UN No.	Substance or Article		Remarks
-	METHYLBROMOACETONE	1	
1647	METHYL BROMIDE AND ETHYLENE DIBROMIDE MIXTURES, LIQUID		
1693	TEAR GAS SUBSTANCES, LIQUID, N.O.S.	}	Spillage may be gaseous.
2017	AMMUNITION, TEAR PRODUCING, NON-EXPLOSIVE, with neither burster nor expelling charge, non-fuzed		

TOXIC SOLIDS, FLAMMABLE

Special Emergency Equipment to be carried

Full protective clothing (gloves, boots, coveralls, headgear, goggles). Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear full protective clothing when dealing with SPILLAGE. Wear protective clothing and self-contained breathing apparatus when dealing with FIRE.

EMERGENCY ACTION

Avoid all sources of ignition (e.g. naked lights, unprotected light bulbs, electric handtools).

	On deck	Under deck
SPILLAGE	Collect spillage, where practicable, for safe disposal. Wash remainder overboard with copious quantities of water.	Collect spillage, where practicable, for safe disposal.
FIRE	Use water spray from as far away as practicable. If possible remove receptacles likely to be involved or keep	Batten down; use ship's fixed fire-fighting installation. Otherwise adopt action as for ''On deck''.

First Aid - See IMO Medical First Aid Guide (MFAG)

them cool with copious quantities of water.

UN No.	Substance or Article	Remarks
1567	BERYLLIUM POWDER	Water used on the burning substance may cause a violent reaction. Carbon dioxide unsuitable for fire, use inert material. Wear self-contained breathing apparatus when dealing with spillage.
1596	DINITROANILINES	In fire, explosion hazard.

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UN No.	Substance or Article	Remarks
1597	DINITROBENZENES, SOLID	In fire, explosion hazard.
1687	SODIUM AZIDE	In fire, explosion hazard. Keep spillage wet with water.
1693	TEAR GAS SUBSTANCES, SOLID, N.O.S.) Spillage was be
1700	TEAR GAS CANDLES, non- explosive.	Spillage may be gaseous. Turn ship off wind.
1843	AMMONIUM DINITRO-ortho- CRESOLATE, SOLID	
2038	DINITROTOLUENES, SOLID	In fire, explosion hazard.

TOXIC SOLIDS, NOT COVERED BY OTHER SCHEDULES

Special Emergency Equipment to be carried

Full protective clothing (gloves, boots, coveralls, headgear, goggles). Self-contained breathing apparatus.

EMERGENCY PROCEDURES

Wear full protective clothing when dealing with SPILLAGE. Wear protective clothing and self-contained breathing apparatus when dealing with FIRE.

EMERGENCY ACTION

On deck

Under deck

SPILLAGE Collect spillage, where

practicable, for safe disposal. Wash remainder overboard with copious quantities of Collect spillage, where practicable, for safe disposal.

water.

FIRE

Use copious quantities of

water or other medium to fight fire and cool down receptacles.

Batten down; use ship's fixed fire-fighting installation. Otherwise adopt action as for "On deck".

First Aid - See IMO Medical First Aid Guide (MFAG)

UN No.	Substance or Article	Remarks
1566	BERYLLIUM COMPOUNDS, N.O.S.	Wear self-contained breathing apparatus when dealing with spillage.
1598	DINITRO-ortho-CRESOL	In fire, explosion hazard.
1642	MERCURY OXYCYANIDE, DESENSITIZED	In fire, explosion hazard.
2212	ASBESTOS, BLUE	Wear self-contained breathing appa-
2590	ASBESTOS, WHITE	ratus when dealing with spillage.
2727	THALLIUM NITRATE	In fire situation, use copious quantities of water. Ship's fixed fire-fighting installation may not be effective.
2969 3048	CASTOR BEANS ALUMINIUM PHOSPHIDE PESTICIDES	Wear self-contained breathing apparatus when dealing with spillage.

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EmS DELETED

EMERGENCY SCHEDULE 6.1-07

TOXIC SUBSTANCES, DANGEROUS WHEN WET

FIRE

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus. Dry chemical.

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

Avoid all sources of ignition (e.g. naked lights, unprotected light bulbs, electric handtools). Turn ship off wind.

	On deck	Under deck
SPILLAGE	Collect spillage, where practicable, for safe disposal. Keep water away unless to	Provide adequate ventilation. Keep dry. Collect spillage, where

wash remainder of spillage practicable, for safe disposal. overboard with copious quantities of water.

Use dry chemical.

If possible remove fixed fire-fighting installation receptacles likely to be involved.

Batten down; use ship's fixed fire-fighting installation (not water). Otherwise adopt action as for ''On deck''.

TOXIC SUBSTANCES, SELF-HEATING

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

On deck

Under deck

SPILLAGE Wash spillage overboard with

Keep spillage wet and

copious quantities of water.

dispose of safely.

FIRE

Use water spray from as far away as practicable.

Batten down; use ship's fixed fire-fighting installation. Otherwise adopt action as for "On deck".

First Aid - See IMO Medical First Aid Guide (MFAG)

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RESERVED

CLASS 7

EMERGENCY SCHEDULE 7-01

RADIOACTIVE MATERIALS, FISSILE, N.O.S.,
RADIOACTIVE MATERIALS, N.O.S., and
RADIOACTIVE MATERIALS, SPECIAL FORM, N.O.S.,
transported in Type A or Type B packages and packages for fissile material
UN No. 2918

UN No. 2982 UN No. 2974

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus. Inert absorbent material (e.g. diatomaceous earth).

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

Type B packages are designed and constructed to withstand severe accidents including FIRE. Do not touch damaged packages or spilt material. Isolate area around damaged packages. Limit entry to shortest time possible.

On deck Under deck LOSS OF An external radiation hazard may exist if Adopt action as SHIELDING the substance has been separated from for "On deck". the shielding or if the shielding has been damaged. In this case isolate area and seek expert advice. SPILLAGE Cover liquid spill with inert absorbent Adopt action as material. Sheet over packages and for "On deck". contents to protect and avoid dispersal. Speedily collect and isolate potentially contaminated equipment and sheet over. Seek expert advice. **FIRE** Use water jets from as far away as Batten down; use practicable. Keep adjacent receptacles ship's fixed firecool. Speedily collect and isolate fighting installation. potentially contaminated equipment and Otherwise adopt sheet over. If possible remove receptacles action as for likely to be involved. Seek expert advice. "On deck".

First Aid - See IMO Medical First Aid Guide (MFAG)

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Possible restowage of fissile packages

Check transport documents which will indicate which packages are involved. If packages are restowed the following procedures should be followed:

- 1. If labels are legible, restow in groups of up to 50 transport indices with not less than 6 m separation between groups. Other neutral cargo may be stowed between groups.
- If labels are not legible, stow packages singly at not less than 6 m separation. Other neutral cargo may be stowed between packages.

EMERGENCY SCHEDULE 7-02

RADIOACTIVE MATERIALS, LOW SPECIFIC ACTIVITY MATERIAL (LSA) N.O.S. and RADIOACTIVE MATERIALS, SURFACE CONTAMINATED OBJECTS (SCO)

UN No. 2912 UN No. 2913

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus. Spray nozzles.

Inert absorbent material (e.g. diatomaceous earth).

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

Do not touch damaged packages or spilt material. Isolate area around damaged packages. Limit entry to shortest time possible.

On deck

Under deck

SPILLAGE Cover liquid spill with inert absorbent material. Sheet

over packages and contents to protect and avoid dispersal. Collect and isolate

potentially contaminated equipment and sheet over. Seek expert advice.

FIRE

Use water spray. If possible remove receptacles likely to be involved or keep them cool with copious quantities of water. Collect and isolate potentially contaminated equipment and sheet over. Seek expert advice.

Adopt action as for "On deck".

Batten down; use ship's fixed fire-fighting installation. Otherwise adopt action as

for "On deck".

RADIOACTIVE MATERIALS, THORIUM METAL or URANIUM METAL, PYROPHORIC UN No. 2975 UN No. 2979

STOWAGE "ON DECK ONLY"

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus. Spray nozzles.

Inert absorbent material (e.g. diatomaceous earth).

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

Substance may burn fiercely.

On deck

Under deck

Smother with inert absorbent SPILLAGE

Not applicable.

material. Dispose of

overboard in a safe manner.

Remove undamaged

remaining substance

receptacles to a safe place.

FIRE

For small fires, use inert material. For large fires, use water spray from as many hoses as possible from as far away as practicable. Keep adjacent receptacles cool until well after fire is extinguished. If possible remove receptacles likely to be involved. Material may reignite after fire is extinguished. Dispose of

overboard in a safe manner.

Not applicable.

First Aid - See IMO Medical First Aid Guide (MFAG)

EMERGENCY SCHEDULE 7-04

RADIOACTIVE MATERIALS, URANIUM HEXAFLUORIDE, FISSILE, FISSILE EXCEPTED or NON-FISSILE

> UN No. 2977 UN No. 2978

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

Spillage will be corrosive.

On deck

Under deck

SPILLAGE Wash overboard with copious quantities of water from as far away as possible. Do not direct

Collect spillage for safe disposal.

water jets onto leak area. Do not allow water inside receptacles.

Seek expert advice.

FIRE

If possible remove receptacles likely to be involved or keep them cool with copious quantities of water. Water spray may be used to reduce vapours. Seek expert advice.

Batten down; use ship's fixed fire-fighting installation.

Otherwise adopt action as for

"On deck".

First Aid - See IMO Medical First Aid Guide (MFAG)

Possible restowage of fissile packages

Check transport documents which will indicate which packages are involved. If packages are restowed the following procedures should be followed:

- 1. If labels are legible, restow in groups of up to 50 transport indices with not less than 6 m separation between groups. Other neutral cargo may be stowed between groups.
- 2. If labels are not legible, stow packages singly at not less than 6 m separation. Other neutral cargo may be stowed between packages.

RADIOACTIVE MATERIALS, THORIUM NITRATE, SOLID or URANYL NITRATE, SOLID UN No. 2976 UN No. 2981

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus.

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

On deck

Under deck

SPILLAGE Collect spillage for safe disposal. Wash remainder overboard with copious quantities of water. Do not use sawdust or other combustible materials as absorbents. Contaminated clothing must be removed and washed carefully with copious quantities of water.

Collect spillage for safe disposal. Do not use sawdust or other combustible materials as absorbents. Contaminated clothing must be removed and washed carefully with copious quantities of water.

FIRE

Use copious quantities of water to fight a fire. If possible remove receptacles likely to be involved or keep them cool with copious quantities of water.

Ship's fixed fire-fighting installation may not be effective. Adopt action as for "On deck".

First Aid - See IMO Medical First Aid Guide (MFAG)

EMERGENCY SCHEDULE 7-06

RADIOACTIVE MATERIALS, URANYL NITRATE HEXAHYDRATE SOLUTION UN No. 2980

STOWAGE "ON DECK ONLY"

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus.

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

Spillage will be corrosive.

On deck

Under deck

SPILLAGE Wash overboard with copious Not applicable.

quantities of water.

FIRE

If possible remove

Not applicable.

receptacles likely to be involved or keep them cool

with water.

RADIOACTIVE MATERIALS, EXCEPTED PACKAGES UN No. 2910

Special Emergency Equipment to be carried

Protective gloves and boots. Self-contained breathing apparatus. Inert absorbent material (e.g. diatomaceous earth).

EMERGENCY PROCEDURES

Wear protective gloves, boots and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

On	deci
OII	ueci

Under deck

SPILLAGE

FIRE

Collect spillage for safe

disposal.

Wash remainder overboard with copious quantities of

water. Use copious quantities of

water to fight fire. If possible, remove receptacles likely to be

involved.

Collect spillage for safe

disposal.

For liquid spills collect with inert absorbent material. Sheet over spill area.

Batten down; use ship's fixed fire-fighting installation. Otherwise adopt action as

for "On deck".

First Aid - See IMO Medical First Aid Guide (MFAG)

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BADIOACTIVE MATERIALS, transported under special arrangement

Special Emergency Equipment to be carried

As specially designated by the competent authorities concerned.

EMERGENCY PROCEDURES

As specially designated by the competent authorities concerned and declared by the shipper.

Unless specifically indicated by the competent authorities, treat as on EmS 7-01.

First Aid - See IMO Medical First Aid Guide (MFAG)

Possible restowage of fissile class II or fissile class III packages

Check transport documents which will indicate which packages are involved. Restow according to the following procedures as far as practicable:

- 1. If packages are intact and labels are legible, restow in groups of up to 50 transport indices with not less than 6 m separation between groups. Other neutral cargo may be stowed between groups.
- If packages are intact but labels are not legible, stow packages singly at not less than 6 m separation. Other neutral cargo may be stowed between packages.
- If packages are not intact, isolate the area, sheet over the packages and contents to protect and avoid dispersal. Seek expert advice.

CLASS 8

EMERGENCY SCHEDULE 8-01

STRONG CORROSIVE SUBSTANCES, FLAMMABLE, FLASHPOINT 61°C c.c. OR BELOW: STOWAGE "ON DECK ONLY"

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

Use of water on substance may cause violent reaction. Avoid all sources of ignition (e.g. naked lights, unprotected light bulbs, electric handtools). Turn ship off wind.

On deck

Under deck

SPILLAGE Wash overboard with copious Not applicable.

quantities of water from as

far away as practicable.

FIRE

Use water spray; wash deck

Not applicable.

in vicinity with copious quantities of water from as far away as practicable.

STRONG CORROSIVE SUBSTANCES, COMBUSTIBLE; STOWAGE "ON DECK ONLY"

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

Use of water on substance may cause violent reaction. Turn ship off wind.

On deck

Under deck

Not applicable.

SPILLAGE Was

Wash overboard with copious Not applicable.

quantities of water from as

far away as practicable.

FIRE

Use water spray; wash deck

in vicinity with copious quantities of water from as

far away as possible.

First Aid - See IMO Medical First Aid Guide (MFAG)

EMERGENCY SCHEDULE 8-03

STRONG CORROSIVE SUBSTANCES, NON-COMBUSTIBLE; STOWAGE "ON DECK ONLY"

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

Turn ship off wind.

FIRE

On deck

Under deck

SPILLAGE Use of water on substance

may cause violent reaction.
Wash overboard with copious quantities of water from as

far away as practicable.

If possible remove

receptacles likely to be involved or keep them cool

with water.

Not applicable.

Not applicable.

UN No.	Substance or Article	Remarks
	CHLOROSULPHONIC ACID BORON TRIBROMIDE	Very violent reaction with water; avoid water, if possible use soda ash to neutralize spillage.

CORROSIVE SUBSTANCES, FLAMMABLE, FLASHPOINT 61°C c.c. OR BELOW

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

Avoid all sources of ignition (e.g. naked lights, unprotected light bulbs, electric handtools).

On deck

Under deck

SPILLAGE

Wash overboard with copious

quantities of water.

Collect spillage, where practicable, using absorbent

material for liquids, for safe

disposal.

FIRE

Use water spray.

Batten down, use ship's fixed fire-fighting installation. Otherwise adopt action as

for "On deck".

First Aid - See IMO Medical First Aid Guide (MFAG)

EMERGENCY SCHEDULE 8-05

CORROSIVE SUBSTANCES, COMBUSTIBLE

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

On deck

Under deck

Wash overboard with copious quantities of water.

Collect spillage, where practicable, using absorbent

material for liquids, for safe

disposal.

FIRE Use water spray.

SPILLAGE

Batten down, use ship's fixed fire-fighting installation. Otherwise adopt action as

for "On deck".

UN No.	Substance or Article		Remarks	-
1779	FORMIC ACID	1		
1940	THIOGLYCOLIC ACID			
2028	BOMBS, SMOKE, NON-EXPLOSIVE		Turn ship off wind.	
2262	N,N-DIMETHYLCARBAMOYL CHLORIDE			
2565	DICYCLOHEXYLAMINE)		

CORROSIVE SUBSTANCES, NON-COMBUSTIBLE

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus. Inert absorbent material (e.g. diatomaceous earth). Spray nozzles.

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

On deck

Under deck

FIRE

SPILLAGE Use of water on substance may cause violent reaction. Wash overboard with copious quantities of water from as

Collect spillage, where practicable, using inert absorbent material for liquids, for safe disposal.

far away as practicable.

If possible remove receptacles likely to be involved or keep them cool Adopt action as for "On deck".

with water.

First Aid - See IMO Medical First Aid Guide (MFAG)

UN No.	Substance or Article	Remarks
1725	ALUMINIUM BROMIDE, ANHYDROUS	
1726	ALUMINIUM CHLORIDE, ANHYDROUS	
1740	BIFLUORIDES, N.O.S.	Turn ship off wind.
1768	DIFLUOROPHOSPHORIC ACID, ANHYDROUS	Tan sing on wind.
1775	FLUOROBORIC ACID	
1776	FLUOROPHOSPHORIC ACID, ANHYDROUS	

(continued on next page)

(continued)

UN No.	Substance or Article	Remarks
1778	FLUOROSILICIC ACID	1
1782	HEXAFLUOROPHOSPHORIC ACID	
1829	SULPHUR TRIOXIDE, INHIBITED	9
1831	SULPHURIC ACID, FUMING	
2331	ZINC CHLORIDE, ANHYDROUS	
2475	VANADIUM TRICHLORIDE	Turn ship off wind.
2503	ZIRCONIUM TETRACHLORIDE	
2670	CYANURIC CHLORIDE	
2672	AMMONIA SOLUTIONS, with more than 10% but not more than 35% ammonia	
2691	PHOSPHORUS PENTABROMIDE	,

MILD CORROSIVE SUBSTANCES, COMBUSTIBLE

Special Emergency Equipment to be carried

Protective gloves and goggles. Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear protective gloves and goggles when dealing with SPILLAGE. Wear protective gloves and self-contained breathing apparatus when dealing with FIRE.

EMERGENCY ACTION

On deck

Under deck

SPILLAGE Wash overboard with copious

quantities of water.

Collect spillage, where practicable, using absorbent

material for liquids, for safe

disposal.

FIRE

Use water spray.

Batten down, use ship's fixed fire-fighting installation. Otherwise adopt action as

for "On deck".

First Aid - See IMO Medical First Aid Guide (MFAG)

EMERGENCY SCHEDULE 8-08

MILD CORROSIVE SUBSTANCES, NON-COMBUSTIBLE

Special Emergency Equipment to be carried

Protective gloves and goggles. Self-contained breathing apparatus.

EMERGENCY PROCEDURES

Wear protective gloves and goggles when dealing with SPILLAGE. Wear protective gloves and self-contained breathing apparatus when dealing with FIRE.

EMERGENCY ACTION

On deck

Under deck

SPILLAGE Wash overboard with copious

quantities of water.

Collect spillage, where

Adopt action as for

practicable, using absorbent material for liquids, for safe

disposal.

FIRE

If possible remove

receptacles likely to be

involved or keep them cool

"On deck".

with water.

UN No.	Substance or Article	Remarks
1845	CARBON DIOXIDE, SOLID	Avoid all skin contact. No action necessary in fire situation.

EmS DELETED

EMERGENCY SCHEDULE 8-10

BATTERIES

	Special Emergency Equipment to be carried		
Protective (Protective gloves and goggles.		
	EMERGENCY PROCEDURES		
Wear prote	Wear protective gloves and goggles when dealing with SPILLAGE.		
	EMERGENCY ACTION		
	On deck	Under deck	
SPILLAGE	Wash overboard with copious quantities of water.	Collect spillage, where practicable, using absorbent material and dispose of overboard in a safe manner.	
FIRE	No special precautions necessary.	No special precautions necessary.	
First Aid - See IMO Medical First Aid Guide (MFAG)			

HYDRAZINE, HYDRATE or HYDRAZINE AQUEOUS SOLUTIONS with not more than 64% hydrazine, by mass (UN No. 2030)

Special Emergency Equipment to be carried

Protective clothing (gloves, boots coveralls, headgear). Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

Avoid all sources of ignition (e.g. naked lights, unprotected light bulbs, electric handtools).

	On deck	Under deck
SPILLAGE	Wash overboard with copious quantities of water from as far away as practicable.	Collect spillage, where practicable, using absorbent material for liquids, for safe disposal.
FIRE	Use water spray from as many hoses as possible from as far away as practicable.	Batten down; use ship's fixed fire-fighting installation. Otherwise adopt action as for "On deck".

First Aid - See IMO Medical First Aid Guide (MFAG)

EMERGENCY SCHEDULE 8-12

GALLIUM AND MERCURY

Special Emergency Equipment to be carried

Protective gloves.

Self-contained breathing apparatus.

Cleaning-up material (e.g. zinc dust, sulphur).

EMERGENCY PROCEDURES

Wear protective gloves when dealing with SPILLAGE. Wear self-contained breathing apparatus when dealing with FIRE in adjacent cargoes.

EMERGENCY ACTION

On deck

Under deck Attempt to contain with wet

SPILLAGE Attempt to contain with wet

sand. Recover if possible; otherwise treat with the appropriate material.

sand. Recover if possible; otherwise treat with the appropriate material.

FIRE

Keep cool.

Non-combustible. Evolves

toxic vapours.

MOLTEN CORROSIVE SUBSTANCES; STOWAGE "ON DECK ONLY"

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus. Spray nozzles.

Inert material (e.g. sand).

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

On deck

Under deck

SPILLAGE Contain molten product if

Not applicable.

practicable using inert material. Collect solid

material for safe disposal.

FIRE Use water spray.

Not applicable.

First Aid - See IMO Medical First Aid Guide (MFAG)

UN No.	Substance or Article	Remarks
2576	PHOSPHORUS OXYBROMIDE, MOLTEN	Non-combustible. Use of water on substance may cause violent reaction.

EmS DELETED

CORROSIVE SUBSTANCES, NOT COVERED BY OTHER SCHEDULES

Special Emergency Equipment to be carried

Protective clothing (gloves, boots, coveralls, headgear). Self-contained breathing apparatus. Spray nozzles.

EMERGENCY PROCEDURES

Wear protective clothing and self-contained breathing apparatus when dealing with SPILLAGE or FIRE.

EMERGENCY ACTION

Use of water on substance may cause violent reaction.
Avoid all sources of ignition (e.g. naked lights, unprotected light bulbs, electric handtools).
Turn ship off wind.

	on wind.	
	On deck	Under deck
SPILLAGE	Wash overboard with copious quantities of water from as far away as practicable.	Collect spillage, where practicable, using absorbent material for liquids, for safe disposal.
FIRE	Use water spray from as far away as practicable. Wash deck in vicinity with copious quantities of water. If possible remove receptacles	Batten down; use ship's fixed fire-fighting installation. Otherwise adopt action as for "On deck".

First Aid - See IMO Medical First Aid Guide (MFAG)

likely to be involved or keep them cool with copious quantities of water.