

Table for waste classification of hazardous and radioactive waste; and suggestions for related transport classification

This document shows correct waste classification (Norwegian waste codes and EWL codes) as they shall be used, as well as giving suggestions of correct transport classification that may be used when declaring hazardous and radioactive waste.

Norog has determined a combination of relevant Norwegian waste codes and EWL codes to be used. Hazardous waste codes are put in the 7xxx-series, while corresponding wastes with radioactivity are given an analogue 3xxx-series. The classification gives a unique combination of Norwegian waste code and EWL codes, hence the table has only one line with that specific combination.

The sender is always responsible for correct transport classification of the waste, which may deviate from this table, depending on contents and properties. See MSDS and IMDG or ADR/RID if necessary.

- * Deviations from the table may be due to chemical contents classified as poisonous, attributed to hazard class 6.1.
- * Deviations from the table may also be due to volatile hydrocarbon content which will represent a fire hazard. Flash point and boiling point will determine the flammable liquid's packing group (I, II or III).
- * Packing group I is for content representing high danger, II for content representing medium danger and III for low danger.
- * Other UN numbers than those listed may also be relevant, depending on the waste's contents. Use of other UN numbers will also result in use of other EmS numbers and another proper shipping name.
- * N.O.S. positions are used for mixtures and when the substance is not listed in the IMDG index (list of goods). Use the word "waste" in front of the goods' name as the proper shipping name. Add the two most dangerous substances in brackets for such N.O.S. positions (when added with special provision 274 in IMDG).

* Entries for transport classification relates to cargo. In the case of bulk transport, use requirements in the IBC code.

Waste classification						Transport classification						
WASTE CATEGORIES	DESCRIPTION	Notes	Type of waste	Waste code	EWL code	Hazard class	UN-number	Packing group	Hazard label	EmS-number	Marine pollutant	Proper shipping name
Batteries	Cadmium batteries	1	Hazardous waste	7084	*160602	9	3496	-	9	F-A, S-I	-	WASTE, BATTERIES, NICKEL-METAL HYDRIDE
	Mercury batteries, button-cell batteries		Hazardous waste	7082	*160603	Not subjected to IMDG/ADR						
	Lead-acid batteries ("car batteries")	2	Hazardous waste	7092	*160601	8	2794	-	8	F-A, S-B	-	WASTE, BATTERIES, WET, FILLED WITH ACID
	Unsorted small batteries		Hazardous waste	7093	*200133	Not subjected to IMDG/ADR						
	Lithium ion batteries	3	Hazardous waste	7094	*160213	9	3480 3090	-	9A	F-A, S-I	-	WASTE, LITHIUM ION BATTERIES (including lithium ion polymer batteries) / WASTE, LITHIUM METAL BATTERIES
Blasting sand	Contaminated blasting sand	4,5	Hazardous waste	7096	*120116	Not subjected to IMDG/ADR						
	Contaminated blowing agent with high organic content	4,5	Hazardous waste	7152	*120116	Not subjected to IMDG/ADR						
Drilling related waste	Oily emulsions from drill floor	4	Hazardous waste	7031	*130802	Normally not subjected to IMDG/ADR						
	Oil based drilling fluid	4	Hazardous waste	7142	*165071	Normally not subjected to IMDG/ADR						
	Drill cuttings with oil based drilling fluids	4,6	Hazardous waste	7143	*165072	Normally not subjected to IMDG/ADR						
	Drill cuttings with oil based drilling fluids, containing milling swarf	4,6,7	Hazardous waste	7143	*130899	Normally not subjected to IMDG/ADR						
	Drill cuttings with oil based drilling fluids, containing cement	4,6	Hazardous waste	7143	*165074	Normally not subjected to IMDG/ADR						
	Slurrified cuttings	6	Hazardous waste	7143	*165073	Normally not subjected to IMDG/ADR						
	Water based drilling fluids	4	Hazardous waste	7144	*165073	Normally not subjected to IMDG/ADR						
	Saline completion fluids, brine	4	Hazardous waste	7097	*165073	Normally not subjected to IMDG/ADR						
	Drill cuttings with water based drilling fluids	4,6	Hazardous waste	7145	*165073	Normally not subjected to IMDG/ADR						
	Drill cuttings with water based drilling fluids, containing milling swarf	4,6,7	Hazardous waste	7145	*165076	Normally not subjected to IMDG/ADR						
	Drill cuttings with water based drilling fluids, containing cement	4,6	Hazardous waste	7145	*165074	Normally not subjected to IMDG/ADR						
	Base oil		Hazardous waste	7142	*130899	Normally not subjected to IMDG/ADR						
	Oil well related waste	Waste from well operations (such as well cleaning, stimulating), <u>not</u> contaminated with crude oil or condensate	4,8	Hazardous waste	7031	*165073	Normally not subjected to IMDG/ADR					
Waste from well operations (such as well cleaning, stimulating) contaminated with crude oil or condensate		4	Hazardous waste	7025	*130802	3	1993	II	3	F-E, S-E	P	WASTE, FLAMMABLE LIQUIDS, N.O.S. (CONDENSATE, CRUDEOIL)
Waste from P&A operations, <u>not</u> contaminated with crude oil or condensate		4,8	Hazardous waste	7031	*165074	Normally not subjected to IMDG/ADR						
Waste from P&A operations, contaminated with crude oil or condensate		4	Hazardous waste	7025	*165074	3	1993	II	3	F-E, S-E	P	WASTE, FLAMMABLE LIQUIDS, N.O.S. (CONDENSATE, CRUDEOIL)
Catalytic material	Catalytic material from gas cleansing		Hazardous waste	7096	*160807	4,2	3088	III	4,2	F-A, S-J	-	WASTE, SELF-HEATING SOLID, ORGANIC, N.O.S. (CUPPERSULFIDE, ZINKSULFIDE)
	Catalytic material with traces of mercury from gas cleansing		Hazardous waste	7096	*060404	4,2	3190	III	4,2	F-A, S-J	-	WASTE, SELF-HEATING SOLID, INORGANIC, N.O.S (CUPPERSULFIDE, ZINKSULFIDE AND LOW LEVEL OF MERCURYSULFIDE)
Chemicals	Laboratory chemicals and mixtures (with halogen content)	8	Hazardous waste	7151	*160506	3 (6,1)	1992	II	3 + 6,1	F-E, S-D	P	WASTE, FLAMMABLE LIQUID, TOXIC, N.O.S. (add note of the two most dangerous substances)
	Laboratory chemicals containing mercury	8	Hazardous waste	7081	*160506	See note 8						
	Laboratory chemicals, inorganic	8	Hazardous waste	7091	*160506	6,1	3288	II	6,1	F-A, S-A	-	WASTE, TOXIC, SOLID, INORGANIC, N.O.S (add note of the two most dangerous substances)
	Laboratory chemicals, organic	8	Hazardous waste	7152	*160506	See note 8						
	Chemical residue, inorganic, solids	8	Hazardous waste	7091	*160507	See note 8						
	Chemical residue, inorganic, fluids	8	Hazardous waste	7097	*160507	See note 8						
	Chemical residue, organic	8	Hazardous waste	7152	*160508	See note 8						
	Chemical bags with residues	8	Hazardous waste	7152	*150110	See note 8						
	Plastic packaging with residue from oils or other chemicals	4,8	Hazardous waste	7012	*150110	See note 8						
	Acidic waste, inorganisk (e.g. hydrochloric acid, phosphoric acid, etc)	8	Hazardous waste	7131	*160507	8	3264	II	8	F-A, S-B	-	WASTE, CORROSIVE LIQUID, ACIDIC, INORGANIC N.O.S (add note of the two most dangerous substances)
	Alkaline waste, inorganic (e.g. sodium hydroxide, lime, etc)	8	Hazardous waste	7132	*160507	8	3266	II	8	F-A, S-B	-	WASTE, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (add note of the two most dangerous substances)
	Acidic waste, organic (eks. citric acid, acetic acid, etc)	8	Hazardous waste	7134	*160508	8	3265	II	8	F-A, S-B	-	WASTE, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (add note of the two most dangerous substances)
	Alkaline waste, organic (e.g. waste from Cleaning in Place/EDTA)	8	Hazardous waste	7135	*160508	8	3267	II	8	F-A, S-B	-	WASTE, CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (add note of the two most dangerous substances)
	Organic chemicals with halogens	8	Hazardous waste	7151	*165074	See note 8						
	AFFF residue, extinguishing agents containing halogen	8	Hazardous waste	7151	*160508	See note 8						

Waste Category	Description	Quantity	Hazardous	Code	UN	IMDG/ADR	Class	Subclass	Other	Notes
Fluorescent tubes	Fluorescent tubes, UV lamps, energy-saving light bulbs		Hazardous waste	7086	*200121	Not subjected to IMDG/ADR				
Solvents	Organic solvents <u>without</u> halogen (e.g. alcohols such as methanol and ethanol)	8	Hazardous waste	7042	*140603	3	1993	II	3	F-E, S-E - WASTE, FLAMMABLE LIQUIDS, N.O.S. (add note of the two most dangerous substances)
	Organic solvents <u>with</u> halogens (e.g. chlorinated solvents)	8	Hazardous waste	7041	*140602	3 (6,1)	1992	II	3 + 6,1	F-E, S-D P WASTE, FLAMMABLE LIQUID, TOXIC, N.O.S. (add note of the two most dangerous substances)
	Waste containing glycols (MEG, TEG)	8	Hazardous waste	7042	*160508	Normally not subjected to IMDG/ADR				
Paint, all types	Solid, not hardened paint waste (including caulking compounds, rags with solvents, paintbrushes and pails with residues)	4,9	Hazardous waste	7051	*080117	4,1	1325	III	4,1	F-A, S-G - WASTE, FLAMMABLE SOLID, ORGANIC, N.O.S. (PAINT)
	Paint, fluid and pasty	4,9	Hazardous waste	7051	*080111	3	1263	II	3	F-E, S-E - WASTE, PAINT RELATED MATERIAL (including paint thinning or reducing compound)
	Curing agents and caulking foam containing isocyanates	8	Hazardous waste	7121	*080501	3 (6,1)	2478	II	3 + 6,1	F-E, S-D - WASTE, ISOCYANATE SOLUTION, FLAMMABLE, TOXIC, N.O.S. (add note of the two most dangerous substances)
	Curing agents containing organic peroxides (not requiring temperature control)	8	Hazardous waste	7123	*160903	5,2	3105	-	5,2	F-J, S-R WASTE, ORGANIC PEROXIDE TYPE D, LIQUID
Oil contaminated waste	Used lubricating oil fulfilling requirements regarding quality and origin	8,1	Hazardous waste	7011	*130205	9	3082	III	9	F-A, S-F P WASTE, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (add note of the two most dangerous substances)
	Waste oil, mixture	8	Hazardous waste	7012	*130899	9	3082	III	9	F-A, S-F P WASTE, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (add note of the two most dangerous substances)
	Other oily water / slop from engine rooms and maintenance / cleansing processes		Hazardous waste	7030	*161001	Normally not subjected to IMDG/ADR				
	Other crude oil or fluids contaminated with crude oil or condensate	4	Hazardous waste	7025	*130899	3	1993	II	3	F-E, S-E P WASTE, FLAMMABLE LIQUID, N.O.S (CRUDE, CONDENSATE)
	Oil contaminated materials - mixture of oily rags and absorbents, oil filters without metal, filter cloth from cleaning processes, etc.	4,6,11	Hazardous waste	7022	*150202	4,2, see note 4+11	1856		4,2	F-A, S-J - WASTE RAGS, OILY
	Other oil contaminated materials, including hoses with mud or oil content, oily equipment and other oily material	8	Hazardous waste	7022	*130899	Normally not subjected to IMDG/ADR				
	Oil filters with metal		Hazardous waste	7024	*150202	Normally not subjected to IMDG/ADR				
	Shaker screens contaminated with oil based mud		Hazardous waste	7022	*165071	Normally not subjected to IMDG/ADR				
	Shaker screens contaminated with water based mud		Hazardous waste	7144	*150202	Normally not subjected to IMDG/ADR				
	Fuel residues (e.g. diesel, helifuel, petrol, paraffin)	8	Hazardous waste	7023	*130703	3	1993	II	3	F-E, S-E WASTE, FLAMMABLE LIQUID, N.O.S (add note of the two most dangerous substances)
Lubricating grease, other grease (dope)	8	Hazardous waste	7021	*120112	Normally not subjected to IMDG/ADR					
Process related waste	Oil contaminated mud/sediments/scale, excluding drilling related waste	12,13	Hazardous waste	7025	*130502	3	1993	II	3	F-E, S-E - WASTE, FLAMMABLE LIQUID, N.O.S (add note of the two most dangerous substances)
	Oil contaminated mud/sediments/scale with radioactivity, required for depositing, >10 Bq/g	6,12,13	Haz./radioactive waste	3025-1	*130502	7	Consult radiation protection coordinator			
	Oil contaminated mud/sediments/scale with radioactivity, not required for depositing, <10 Bq/g	6,12,13	Haz./radioactive waste	3025-2	*130502	3	1993	II	3	F-E, S-E - WASTE, FLAMMABLE LIQUID, N.O.S (add note of the two most dangerous substances)
	Precipitated sediments without radioactivity, < 1Bq/g		Hazardous waste	7091	190211	Not subjected to IMDG/ADR				
	Precipitated radioactive sediments from descaling activities, >10 Bq/g	12,14	Haz./radioactive waste	3091-1	*190211	7	Consult radiation protection coordinator			
	Precipitated radioactive sediments from descaling activities, <10 Bq/g	12,14	Haz./radioactive waste	3091-2	*190211	Not subjected to IMDG/ADR				
	Oil contaminated matter - pigging waste	12,13	Hazardous waste	7025	*120112	4,1	1325	III	4,1	F-A, S-G - WASTE, FLAMMABLE SOLID, ORGANIC N.O.S (add note of the two most dangerous substances)
	Mud with mercury content	14	Hazardous waste	7081	*130502	6,1	2811	II	6,1	F-A, S-A - WASTE, TOXIC SOLID, ORGANIC, N.O.S. (MERCURY)
	Mud containing mercury and radioactivity, required for depositing, >10 Bq/g	6,14	Haz./radioactive waste	3081-1	*130502	7	Consult radiation protection coordinator			
	Mud containing mercury and radioactivity, not required for depositing, <10 Bq/g	6,14	Haz./radioactive waste	3081-2	*130502	6,1	2811	II	6,1	F-A, S-A - WASTE, TOXIC SOLID, ORGANIC, N.O.S. (MERCURY)
Cement	Unused cement products classified as hazardous waste	8	Hazardous waste	7096	*160507	Normally not subjected to IMDG/ADR				
Spray cans	Spray cans, aerosols	8	Hazardous waste	7055	*160504	2,1	1950	-	2,1	F-D, S-U - WASTE, AEROSOLS
Other waste	Asbestos waste, such as insulation material, filter matter, heat protective equipment	15	Hazardous waste	7250	*170601	9	2212	II	9	F-A, S-A - WASTE, ASBESTOS, AMPHIBOLE
	Ceramic fibres that are classified as hazardous waste	15	Hazardous waste	7091	*170603	Not subjected to IMDG/ADR				
	Waste from offshore treatment of slop	4	Hazardous waste	7142	*161003	Normally not subjected to IMDG/ADR				
	Amine filters - alkaline organic waste	8	Hazardous waste	7135	*150202	8	3263	II	8	F-A, S-B WASTE CORROSIVE, SOLID, BASIC, ORGANIC, N.O.S (add note of the two most dangerous substances)
	Waste with phthalic content, such as a plasticiser in plastics, PVC, roofing and flooring		Hazardous waste	7156	*170204	Not subjected to IMDG/ADR				
	Mercury containing waste (>1000 mg/kg), incl. thermometers containing mercury and sediments containing mercury	4,8	Hazardous waste	7081	*060404	6,1	2811	II	6,1	F-A, S-A WASTE, TOXIC SOLID, ORGANIC, N.O.S. (MERCURY)
	Photo chemicals (incl. photofilm)	8	Hazardous waste	7220	*090101	Normally not subjected to IMDG/ADR				
	Discarded fluorinated gases (e.g. KFK-gases, HKFK-gasses and SF ₆ -gass)	8,16	Hazardous waste	7240	*160504	2	1078		2,2	F-C, S-V - WASTE, REFRIGERANT GAS, N.O.S (add note of the two most dangerous substances)
	Pressurized containers containing dangerous substances	8,17	Hazardous waste	7261	*160504	2	See footnote 16			
	Oxidizing substances (e.g. hydrogen peroxide)	8	Hazardous waste	7122	*160904	5,1	3139 / 1479	II	5,1	F-H, S-Q - WASTE, OXIDIZING LIQUID, N.O.S. (add note of the two most dangerous subst.) WASTE, OXIDIZING SOLID, N.O.S. (add note of the two most dangerous subst.)
	Detergents and cleaners	8	Hazardous waste	7133	*070601	See note 8				
	Infectious waste	18	Infectious waste			6,2	3291	II	6,2	F-A, S-T - CLINICAL WASTE, UNSPECIFIED, N.O.S.
	Windows containing PCB		Hazardous waste	7211	*170902	Not subjected to IMDG/ADR				
	Wastes containing chlorinated paraffins (windows and other waste)		Hazardous waste	7158	*170903	Not subjected to IMDG/ADR				
	Waste containing flame retardants, such as cellular rubber, PE foam mats and EPS insulation		Hazardous waste	7155	*170603	Not subjected to IMDG/ADR				

- 1) NiCd batteries are formally exempted from provisions of transport classification according to IMDG, but due to the risk of mixing, it is recommended that the waste be classified in the same way as nickel metal hydride batteries and thus with UN3496, cl. 9, EmS F-A, S-I, proper shipping name WASTE, BATTERIES, NICKEL-METAL HYDRIDE. However, nickel metal hydride batteries are exempted from requirements according to IMDG / ADR if the amount is less than 100 kg gross and if the waste is properly packaged and secured against short circuit (obtained from SP963 - "shall be securely packed and protected from short circuit"). If the quantity is over 100 kg gross, the requirements for dangerous goods (ref. SP963, requirements for declaration, storage and cargo will apply).
For cadmium-containing batteries with a risk of leakage, classification UN2795, cl. 8, hazard label 8, Ems F-A, S-B, proper shipping name WASTE, BATTERIES, WET, FILLED WITH ALKALI, electric storage should be used.

- 2) For leakage-free lead batteries, the following classification is used: UN2800, cl. 8, hazard label 8, proper shipping name BATTERIES, WET, NON-SPILLABLE electric storage
- 3) For lithium batteries it is distinguished by UN number and proper shipping name from whether the batteries are rechargeable (lithium ion batteries - UN3480 - WASTE, LITHIUM ION BATTERIES (including lithium ion polymer batteries)) or not rechargeable (lithium metal batteries - UN3090 - LITHIUM METAL BATTERIES).

When WEE (Waste of Electric and Electronic Equipment) waste containing lithium batteries is to be transported, the waste must be classified as dangerous goods in the following manner:

For WEEE with rechargeable batteries the following classification is used: UN3481, cl. 9, EmS F-A, S-I, proper shipping name WASTE, LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT or LITHIUM ION BATTERIES PACKED WITH EQUIPMENT (including lithium ion polymer batteries)

or

For WEEE waste with non-rechargeable batteries the following is used: UN 3091, cl. 9, EmS F-A, S-I, proper shipping name WASTE, LITHIUM METAL BATTERIES CONTAINED IN EQUIPMENT or LITHIUM METAL BATTERIES PACKED WITH EQUIPMENT (including lithium alloy batteries)

If lithium batteries installed in the equipment are removed, then the EE waste should not be considered as dangerous goods unless the equipment does not contain other components of dangerous goods.

- 4) See the Guideline's appendix 1 for a description of the waste.
- 5) Content of pollutants/hazardous substances to be documented.
- 6) Use the 3xxx-1 series for radioactivity > 10 Bq/q and the 3xxx-2 series for radioactivity between 1 and 10 Bq/g.
- 7) For waste containing mill swarf/chips (Norwegian term: millespon), add "Contains mill swarf/chips" to the declaration form's field for additional information.
- 8) See the MSDS for chemical properties to help determine whether a certain compound is classified as dangerous goods or not. Certain compounds may have more descriptive UN numbers. The UN number may also depend on whether the compound is solid or fluid. Add at least two of the compound's main substances in the brackets following the proper shipping name. If the applicable MSDS's item 14 shows a different transport classification than here, the MSDS one shall be used. The waste may also be subject to environmental hazard labelling. This should be assessed. There may also be requirements for orientation arrows on the packaging (ref. IMDG 5.2.1.7/ADR 5.2.1.10) if waste is transported as combination packaging that has inner packaging containing liquid dangerous goods.
- 9) Completely empty pails (only thin, dry and hardened film of paint) can be sorted as metal or plastic waste.
- 10) See the Guideline's chapter 5.4.5 for a description of refundable waste oil. Use EWL code *130110 for hydraulic oils.
- 11) The suggested classification applies to oily rags, and is regulated by the IMDG code. Oily absorbents, oil filters without metal and filter cloth from decontamination units etc. will normally not be subject to the transport regulations. The sender must make this evaluation and decision, if needed. NB: Rags containing solvents to be discarded with solid non hardened paint waste.
- 12) Use waste code 7025 and EWL 130502 for waste where the mercury content is below the limit values for hazardous waste (1000 ppm). Add a note of the mercury content in the declaration form's field for additional information.
- 13) Waste that is flammable solids, and not flammable mud/fluids, should be classified as: Hazard class 4.1, UN 1325, packing group II, hazard label 4.1, EmS no. F-A, S-G, proper shipping name "WASTE, FLAMMABLE SOLID, ORGANIC N.O.S (add note of the compound's two most dangerous substances)". Use the same classification for crude oil contaminated rags, but change the packing group to III.
- 14) Any oil content shall be noted in the declaration form's field for additional information.
- 15) The Asbestos Regulations' qualification requirements for handling materials with asbestos content must be fulfilled. This also applies to packaging of asbestos waste. Ceramic fibres are to be packed in the same way as asbestos.
- 16) For SF6-gas UN1080 shall be used, along with proper shipping name WASTE, SULPHUR HEXAFLUORIDE.
- 17) A gas' properties will determine whether is hazardous or non-hazardous waste. In either case, it will be considered dangerous goods. It is, however recommended to prepare a declaration due to the hazard of the pressure. The mentioned classification only apply to pressurized containers being sent ashore as waste, not those destined for refill. UN-number for some relevant gases; for nitrogen UN1066 should be used; for acetylene, use UN1001; for compressed air, use UN1002; for fire extinguishers, use UN1044; for oxygen, use UN1072; all with associated transport classification and proper shipping name.
- 18) Packing instruction P621 requires rigid and leak-proof packaging, and that the packaging contain sufficient absorbent material to absorb the entire amount of liquid present. Packagings intended to contain sharp objects such as broken glass and needles shall be resistant to puncture and retain liquids. The waste shall not be declared in the avfallsdeklarerings.no.