MARPOL, Annex II, Categorization Of Noxious Liquid Substances

Abbreviated legend to the revised GESAMP Hazard Evaluation Procedure

	A Bioaccumulation and Biodegradation			B Aquatic Toxicity	
Numerical rating	A1 Bioaccumulation		A2 Biodegradation	B1 Acute toxicity $LC/EC/IC_{50}$ (mg/L)	B2 Chronic toxicity EC_{10} or NOEC (mg/L)
	A1a: log P_{ow}	A1b: BCF			
0	log <1, log > ca.7 MW > 1000	no measurable BCF	R: readily biodegradable	AT >1000	CT >1
1	1≤ log <2	1≤ BCF <10	NR: not readily biodegradable	100< AT ≤1000	0.1< CT ≤1
2	2≤ log <3	10≤ BCF <100		10< AT ≤100	0.01< CT ≤0.1
3	3≤ log <4	100≤ BCF <500		1< AT ≤10	0.001 < CT ≤0.01
4	4≤ log <5	500≤ BCF <4000		0.1< AT ≤1	CT ≤0.001
5	5≤ log < ca.7	BCF ≥4000		0.01< AT ≤0.1	
6				AT ≤0.01	

	C Acute Mammalian Toxicity				
Numerical rating	C1 Oral toxicity	C2 Dermal toxicity	C3 Inhalation toxicity		
			C3a		C3b
	LD_{50}/ATE (mg/kg)	LD_{50}/ATE (mg/kg)	vapour/mist LC_{50}/ATE (mg/L)	mist only LC_{50}/ATE (mg/L)	vapour only LC_{50}/ATE (mg/L)
0	ATE >2000	ATE >2000	ATE >20	ATE >5	ATE >20
1	300< ATE ≤2000	1000< ATE ≤2000	10< ATE ≤20	1< ATE ≤5	10< ATE ≤20
2	50< ATE ≤300	200< ATE ≤1000	2< ATE ≤10	0.5< ATE ≤1	2< ATE ≤10
3	5< ATE ≤50	50< ATE ≤200	0.5< ATE ≤2	0.05< ATE ≤0.5	0.5< ATE ≤2
4	ATE ≤5	ATE ≤50	ATE ≤0.5	ATE ≤0.05	ATE ≤0.5

	D Irritation, Corrosion and Long-term Health Effects		
Numerical rating	D1 Skin irritation and corrosion	D2 Eye irritation and corrosion	D3 Long-term health effects
0	not irritating	not irritating	**C** – Carcinogenic **M** – Mutagenic **R** – Reprotoxic **Ss** – Sensitizing to skin **Sr** – Sensitizing to respiratory system **A** – Aspiration hazard **T** – Target Organ Toxicity **N** – Neurotoxic **I** – Immunotoxic
1	mildly irritating	mildly irritating	
2	irritating	irritating	
3	severely irritating or corrosive 3A Corr. (≤4 h) 3B Corr. (≤1 h) 3C Corr. (≤3 min)	severely irritating	

	E Interference with Other Uses of the Sea		
Numerical Rating	E1 Flammability flashpoint (°C)	E2 Physical effects on wildlife and benthic habitats	E3 Interference with coastal amenities
0	- (not flammable, does not burn)	**Fp** - Persistent floater **F** - Floater **S** - Sinker **G** - Gas **E** - Evaporator **D** - Dissolver and combinations thereof	no interference ***no warning***
1	Fp >93		slightly objectionable ***warning, no closure of amenity***
2	60< Fp ≤93		moderately objectionable ***possible closure of amenity***
3	23≤ Fp ≤60		highly objectionable ***closure of amenity***
4	Fp <23		