CLP Classification

		Eye damage	Skin irritation	Skin Sensitizer	STOT - Single	Acute tox (oral)	Acute tox (Inhalation)	Acute tox (dermal)	STOT - Repeat	STOT - Repeat	Geno	Geno	Carc	Carc	Repro tox	Repro tox	Environ Tox	Environ Tox
									STOT RE: 1	STOT RE: 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Acute	Chronic
	Remarks:																	
1	0.05% ≤ Pb < 0.25 % Labelling									H373								-
2	0.25% ≤ Pb < 0.3 % Labelling									H373								H412
3	0.3% ≤ Pb < 0.5 % Labelling									H373					H360 Df			H412
4	0.5% ≤ Pb < 1% Labelling								H372						H360 Df			H412
5	1 % ≤ Pb < 2.5 % Labelling								H372					H351	H360 Df			H412
6	2.5 % ≤ Pb < 25 %								H372					H3	H360		H400	H411

		Eye damage	Skin irritation	Skin Sensitizer	STOT - Single	Acute tox (oral)	Acute tox (Inhalation)	Acute tox (dermal)	STOT - Repeat	STOT - Repeat	Geno	Geno	Carc	Carc	Repro tox	Repro tox	Environ Tox	Environ Tox
									STOT RE: 1	STOT RE: 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Acute	Chronic
	Labelling													51	Df			
7	Pb ≥ 25 % Labelling					H302 (Cat 4)	H332 (Cat 4)		H372					H351	H360Df		H400	H410
8	0.025 % ≤ Cd < 0.25 % Labelling																	H412
9	0. 25 % ≤ Cd < 2.5 % Labelling																	H411
10	2.5% ≥ Cd < 25% Labelling																H400	H410
11	0.05% ≤ Pb < 0.3% 0.025% ≤ Cd < 0.25 % Labelling									H373								H411

		Eye damage	Skin irritation	Skin Sensitizer	STOT - Single	Acute tox (oral)	Acute tox (Inhalation)	Acute tox (dermal)	STOT - Repeat	STOT - Repeat	Geno	Geno	Carc	Carc	Repro tox	Repro tox	Environ Tox	Environ Tox
									STOT RE: 1	STOT RE: 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Acute	Chronic
12	0.3% ≤ Pb < 0.5% 0.025% ≤ Cd < 0.25 % Labelling									H373					H360 Df			H411
13	0.5% ≤ Pb < 1% 0.025% ≤ Cd < 0.25 % Labelling								H372						H360 Df			H411
14	1 % ≤ Pb < 2.5% 0.025% ≤ Cd < 0.25 % Labelling								H372					H351	H360 Df		H400	H411
15	2.5 % ≤ Pb < 25% 0.025% ≥ Cd < 25% Labelling								H372					H351	H360 Df		H400	H410
16	Pb ≥ 25% 0.025% ≥ Cd < 25%					H302 (Cat 4)	H332 (Cat 4)		H372					H351	H360 Df		H400	H410

		Eye damage	Skin irritation	Skin Sensitizer	STOT - Single	Acute tox (oral)	Acute tox (Inhalation)	Acute tox (dermal)	STOT - Repeat	STOT - Repeat	Geno	Geno	Carc	Carc	Repro tox	Repro tox	Environ Tox	Environ Tox
									STOT RE: 1	STOT RE: 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Acute	Chronic
	Labelling																	
17	0.05% ≤ Pb < 0.3% 0.25% ≥ Cd < 25% Labelling									H373							H400	H410
18	0.3% ≤ Pb < 0.5% 0.25% ≥ Cd < 25% Labelling									H373					H360 Df		H400	H410
19	0.5% ≤ Pb < 1% 0.25% ≥ Cd < 25% Labelling								H372						H360 Df		H400	H410
20	1 % ≤ Pb < 2.5% 0.25% ≥ Cd < 25% Labelling								H372					H351	H360 Df		H400	H410
21	0.1 % ≤ NiO < 1 % Labelling												H350i (Cat 1A)					-

		Eye damage	Skin irritation	Skin Sensitizer	STOT - Single	Acute tox (oral)	Acute tox (Inhalation)	Acute tox (dermal)	STOT - Repeat	STOT - Repeat	Geno	Geno	Carc	Carc	Repro tox	Repro tox	Environ Tox	Environ Tox
									STOT RE: 1	STOT RE: 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Acute	Chronic
22	1 % ≤ NiO < 10 % Labelling												H350i (Cat 1A)					H412
23	10 % ≤ NiO < 25 % Labelling			H317					H372				H350i (Cat 1A)					H412
24	NiO ≥ 25 % Labelling			H317					H372				H350i (Cat 1A)					H411
25	0.05% ≤ Pb < 0.25% 0.1 % ≤ NiO < 1 % Labelling									H373			H350i (Cat 1A)					H412
26	0.05% ≤ Pb < 0.3% 1 % ≤ NiO < 10 % Labelling									H373			H350i (Cat 1A)					H412
27	0.05% ≤ Pb < 0.3% NiO ≥ 10 %			H317					H372				H350i (Cat					H411

		Eye damage	Skin irritation	Skin Sensitizer	STOT - Single	Acute tox (oral)	Acute tox (Inhalation)	Acute tox (dermal)	STOT - Repeat	STOT - Repeat	Geno	Geno	Carc	Carc	Repro tox	Repro tox	Environ Tox	Environ Tox
									STOT RE: 1	STOT RE: 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Acute	Chronic
	Labelling												1A)					
28	0.25% ≤ Pb < 0.3% 0.1 % ≤ NiO < 1 % Labelling									H373			H350i (Cat 1A)					H412
29	0.3% ≤ Pb < 0.5 %; 0.1 % ≤ NiO < 1 % Labelling									H373			H350i (Cat 1A)		H360 Df			H412
30	0.3% ≤ Pb < 0.5 %; 1 % ≤ NiO < 10 %; Labelling									H373			H350i (Cat 1A)		H360 Df			H412
31	0.3% ≤ Pb < 0.5 %; NiO ≥ 10 %; Labelling			H317					H372				H350i (Cat 1A)		H360 Df			H411
32	0.5% ≤ Pb < 1%;								H372				H350i (Cat		H360			H412

		Eye damage	Skin irritation	Skin Sensitizer	STOT - Single	Acute tox (oral)	Acute tox (Inhalation)	Acute tox (dermal)	STOT - Repeat	STOT - Repeat	Geno	Geno	Carc	Carc	Repro tox	Repro tox	Environ Tox	Environ Tox
									STOT RE: 1	STOT RE: 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Acute	Chronic
	0.1 % ≤ NiO < 1 % Labelling												1A)		Df			
33	1 % ≤ Pb < 2.5 %; 0.1 % ≤ NiO < 1 % Labelling								H372				H350i (Cat 1A)		H360 Df			H411
34	0.5% ≤ Pb < 1%; 1 % ≤ NiO < 10% Labelling								H372				H350i (Cat 1A)		H360 Df			H412
35	1 % ≤ Pb < 2.5 %; NiO ≥ 10% Labelling			H317					H372				H350i (Cat 1A)		H360 Df			H411
36	2.5 % ≤ Pb < 25 %; 0.1 % ≤ NiO < 10 % Labelling								H372				H350i (Cat 1A)		H360 Df		H400	H411

		Eye damage	Skin irritation	Skin Sensitizer	STOT - Single	Acute tox (oral)	Acute tox (Inhalation)	Acute tox (dermal)	STOT - Repeat	STOT - Repeat	Geno	Geno	Carc	Carc	Repro tox	Repro tox	Environ Tox	Environ Tox
									STOT RE: 1	STOT RE: 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Acute	Chronic
37	2.5 % ≤ Pb < 25 %; NiO ≥ 10% Labelling			H317					H372				H350i (Cat 1A)		H360 Df		H400	H411
38	Pb ≥ 25 %; 0.1 % ≤ NiO < 10 % Labelling					H302 (Cat 4)	H332 (Cat 4)		H372				H350i (Cat 1A)		H360 Df		H400	H410
39	Pb ≥ 25 %; NiO ≥ 10% Labelling			H317		H302 (Cat 4)	H332 (Cat 4)		H372				H350i (Cat 1A)		H360 Df		H400	H410
40	1 % ≤ V2O5 < 3 % Labelling	H319										H341						H412
41	3 %≤ V2O5 <10 % Labelling	H318										H341				H361d***		H412

		Eye damage	Skin irritation	Skin Sensitizer	STOT - Single	Acute tox (oral)	Acute tox (Inhalation)	Acute tox (dermal)	STOT - Repeat	STOT - Repeat	Geno	Geno	Carc	Carc	Repro tox	Repro tox	Environ Tox	Environ Tox
									STOT RE: 1	STOT RE: 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Acute	Chronic
42	10 % ≤ V2O5 < 20 % Labelling	H318							H372			H341				H361d***		H412
43	20 % ≤ V2O5 <25 % Labelling	H318			H335				H372			H341				H361d***		H412
44	V2O5 > 25 % Labelling	H318			H335	H302 (Cat 4)	H332 (Cat 4)		H372			H341				H361d***		H411
45	1 % ≤ V2O5 < 3 %; 0.05% ≤ Pb < 0.3 % Labelling	H319								H373		H341						H412
46	1 % ≤ V2O5 < 3 %; 0.3% ≤ Pb < 0.5 % Labelling	H319								H373		H341			H360Df			H412
47	1 % ≤ V2O5 < 3 %; 0.5% ≤ Pb < 1% Labelling	H319							H372			H341			H360Df			H412

		Eye damage	Skin irritation	Skin Sensitizer	STOT - Single	Acute tox (oral)	Acute tox (Inhalation)	Acute tox (dermal)	STOT - Repeat	STOT - Repeat	Geno	Geno	Carc	Carc	Repro tox	Repro tox	Environ Tox	Environ Tox
									STOT RE: 1	STOT RE: 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Acute	Chronic
48	1 % ≤ V2O5 < 3 %; 1 % ≤ Pb < 2.5 % Labelling	H319							H372			H341		H351	H360Df			H411
49	1 % ≤ V2O5 < 3 %; 2.5 % ≤ Pb < 25 % Labelling	H319				H302 (Cat 4)	H332 (Cat 4)		H372			H341		H351	H360Df		H400	H411
50	1 % ≤ V2O5 < 3 %; Pb ≥ 25 % Labelling	H319				H302 (Cat 4)	H332 (Cat 4)		H372			H341		H351	H360Df		H400	H410
51	3 %≤ V2O5 <10 %; 0.05% ≤ Pb < 0.3 % Labelling	H318								H373		H341				H361d***		H412
52	3 %≤ V2O5 <10 %; 0.3% ≤ Pb < 0.5 % Labelling	H318								H373		H341			H360Df			H412
53	3 %≤ V2O5 <10 %;	H318							H372			H341			H360			H412

		Eye damage	Skin irritation	Skin Sensitizer	STOT - Single	Acute tox (oral)	Acute tox (Inhalation)	Acute tox (dermal)	STOT - Repeat	STOT - Repeat	Geno	Geno	Carc	Carc	Repro tox	Repro tox	Environ Tox	Environ Tox
									STOT RE: 1	STOT RE: 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Acute	Chronic
	0.5% ≤ Pb < 1% Labelling														Df			
54	3 %≤ V2O5 <10 %; 1 % ≤ Pb < 2.5 % Labelling	H318							H372			H341		H351	H360Df			H411
55	3 %≤ V2O5 <10 %; 2.5 % ≤ Pb < 25 % Labelling	H318				H302 (Cat 4)	H332 (Cat 4)		H372			H341		H351	H360Df		H400	H411
56	3 %≤ V2O5 <10 %; Pb ≥ 25 % Labelling	H318				H302 (Cat 4)	H332 (Cat 4)		H372			H341		H351	H360Df		H400	H410
57	10 % ≤ V2O5 < 20 %; 0.05% ≤ Pb < 0.3 % Labelling	H318							H372			H341				H361d***		H412
58	10 % ≤ V2O5 < 20 %; 0.3% ≤ Pb < 0.5	H318							H372			H341			H360			H412

		Eye damage	Skin irritation	Skin Sensitizer	STOT - Single	Acute tox (oral)	Acute tox (Inhalation)	Acute tox (dermal)	STOT - Repeat	STOT - Repeat	Geno	Geno	Carc	Carc	Repro tox	Repro tox	Environ Tox	Environ Tox
									STOT RE: 1	STOT RE: 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Acute	Chronic
	% Labelling														Df			
59	10 % ≤ V2O5 < 20 %; 0.5% ≤ Pb < 1 % Labelling	H318							H372			H341			H360 Df			H411
60	10 % ≤ V2O5 < 20 %; 1 % ≤ Pb < 2.5 % Labelling	H318							H372			H341		H351	H360 Df			H411
61	10 % ≤ V2O5 < 20 %; 2.5 % ≤ Pb < 25 % Labelling	H318				H302 (Cat 4)	H332 (Cat 4)		H372			H341		H351	H360 Df		H400	H411
62	10 % ≤ V2O5 < 20 %; Pb ≥ 25 % Labelling	H318				H302 (Cat 4)	H332 (Cat 4)		H372			H341		H351	H360 Df		H400	H410
63	V2O5 ≥20 %; 0.05%	H318			H33	H302	H332		H372			H341				H361d**		H411

		Eye damage	Skin irritation	Skin Sensitizer	STOT - Single	Acute tox (oral)	Acute tox (Inhalation)	Acute tox (dermal)	STOT - Repeat	STOT - Repeat	Geno	Geno	Carc	Carc	Repro tox	Repro tox	Environ Tox	Environ Tox
									STOT RE: 1	STOT RE: 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Acute	Chronic
	≤ Pb < 0.3 % Labelling				5	(Cat 4)	(Cat 4)									*		
64	V2O5 ≥20 %; 0.3% ≤ Pb < 0.5 % Labelling	H318			H335	H302 (Cat 4)	H332 (Cat 4)		H372			H341			H360Df			H411
65	V2O5 ≥20 %; 0.5% ≤ Pb < 1% Labelling	H318			H335	H302 (Cat 4)	H332 (Cat 4)		H372			H341			H360Df			H411
66	20 % ≤ V2O5; 1 % ≤ Pb < 2.5 % Labelling	H318			H335	H302 (Cat 4)	H332 (Cat 4)		H372			H341		H351	H360Df			H411
67	V2O5 ≥20 %; 2.5 % ≤ Pb < 25 % Labelling	H318			H335	H302 (Cat 4)	H332 (Cat 4)		H372			H341		H351	H360Df		H400	H411
68	V2O5 ≥20 %; Pb ≥ 25 %	H318			H335	H302	H332		H372			H341		H351	H360Df		H400	H410

		Eye damage	Skin irritation	Skin Sensitizer	STOT - Single	Acute tox (oral)	Acute tox (Inhalation)	Acute tox (dermal)	STOT - Repeat	STOT - Repeat	Geno	Geno	Carc	Carc	Repro tox	Repro tox	Environ Tox	Environ Tox
									STOT RE: 1	STOT RE: 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Cat 1A/1B	Cat 2	Acute	Chronic
	Labelling					(Cat 4)	(Cat 4)											

Notes: Frits with 1% ≤ CdO < 5% and SiO2 ≥ 30% and Al2O3 ≥ 1% are exempt from REACH and C&L requirements

Frits with 1% ≤ CdO < 5% and SiO2 < 30% or Al2O3 < 1% have to be registered and classified

Frits with CdO > 5% have to be registered and classified.

Pb Frits containing SiO2 ≥ 30% and Al2O3 ≥ 1% are exempt from REACH and C&L requirements

*** According to the criteria, the general hazard statement can be replaced by the hazard statement indicating only the property of concern, where either fertility or developmental effects are proven to be not relevant.

For STOT classifications, affected organs and route of exposure as are follows:

Affected organs:

Pb: Central nervous system, kidneys and haematological systems

Ni: Lung

Cd: Kidney, lung, bones

V: Respiratory tract

Route of exposure:

Pb: No specific route of exposure

Ni: inhalation.

Cd: Inhalation

V: Inhalation.

GHS Labelling

No		Signal word	Pictograms	H phrases
1	0.05% ≤ Pb < 0.25 %	Warning	GHS08: health hazard 	H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
2	0.25% ≤ Pb < 0.3 %	Warning	GHS08: health hazard 	H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
3	0.3% ≤ Pb < 0.5 %	Danger	GHS08: health hazard 	H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H373: May cause damage to organs <or state all organs affected, if known> through

No		Signal word	Pictograms	H phrases
				prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
4	0.5% ≤ Pb < 1 %	Danger	GHS08: health hazard 	H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
5	1% ≤ Pb < 2.5 %	Danger	GHS08: health hazard 	H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven

No		Signal word	Pictograms	H phrases
				that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
6	2.5 % ≤ Pb < 25 %	Danger	GHS08: health hazard  GHS09: environment 	H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H400: Very toxic to aquatic life.

No		Signal word	Pictograms	H phrases
				H411: Toxic to aquatic life with long lasting effects.
7	Pb ≥ 25 %	Danger	GHS07: exclamation mark  GHS08: health hazard  GHS09: environment 	H302+H332: Harmful if swallowed or if inhaled.H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H410: Very toxic to aquatic life with long lasting effects.
8	0.025 % ≤ Cd < 0.25 %	No Signal word	No Pictograms	H412: Harmful to aquatic life with long lasting effects.
9	0. 25 % ≤ Cd < 2.5 %	No Signal word	GHS09: environment	H411: Toxic to aquatic life with long lasting

No		Signal word	Pictograms	H phrases
				effects.
10	2.5% ≥ Cd < 25%	Warning	GHS09: environment 	H410: Very toxic to aquatic life with long lasting effects.
11	0.05% ≤ Pb < 0.3% 0.025% ≤ Cd < 0.25 %	Warning	GHS08: health hazard  GHS09: environment 	H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H411: Toxic to aquatic life with long lasting effects.

No		Signal word	Pictograms	H phrases
12	0.3% ≤ Pb < 0.5% 0.025% ≤ Cd < 0.25 %	Danger	GHS08: health hazard  GHS09: environment 	H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H411: Toxic to aquatic life with long lasting effects.
13	0.5% ≤ Pb < 1% 0.025% ≤ Cd < 0.25 %	Danger	GHS08: health hazard  GHS09: environment 	H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H411: Toxic to aquatic life with long lasting effects.

No		Signal word	Pictograms	H phrases
14	1% ≤ Pb < 2.5% 0.025% ≤ Cd < 0.25 %	Danger	GHS08: health hazard  GHS09: environment 	H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H400: Very toxic to aquatic life. H411: Toxic to aquatic life with long lasting effects.
15	2.5 % ≤ Pb < 25% 0.025% ≥ Cd < 25%	Danger	GHS08: health hazard	H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>.

No		Signal word	Pictograms	H phrases
			 GHS09: environment 	H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H410: Very toxic to aquatic life with long lasting effects.
16	Pb ≥ 25% 0.025% ≥ Cd < 25%	Danger	GHS07: exclamation mark  GHS08: health hazard 	H302+H332: Harmful if swallowed or if inhaled.H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that

No		Signal word	Pictograms	H phrases
			GHS09: environment 	no other routes of exposure cause the hazard>. H410: Very toxic to aquatic life with long lasting effects.
17	0.05% ≤ Pb < 0.3% 0.25% ≥ Cd < 25%	Warning	GHS08: health hazard  GHS09: environment 	H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H410: Very toxic to aquatic life with long lasting effects.
18	0.3% ≤ Pb < 0.5% 0.25% ≥ Cd < 25%	Danger	GHS08: health hazard  GHS09: environment	H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that

No		Signal word	Pictograms	H phrases
				no other routes of exposure cause the hazard>. H410: Very toxic to aquatic life with long lasting effects.
19	0.5% ≤ Pb < 1% 0.25% ≥ Cd < 25%	Danger	GHS08: health hazard  GHS09: environment 	H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H410: Very toxic to aquatic life with long lasting effects.
20	1% ≤ Pb < 2.5% 0.25% ≥ Cd < 25%	Danger	GHS08: health hazard 	H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven

No		Signal word	Pictograms	H phrases
			GHS09: environment 	that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H410: Very toxic to aquatic life with long lasting effects.
21	0.1 % ≤ NiO < 1 %	Danger	GHS08: health hazard 	H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
22	1 % ≤ NiO < 10 %	Danger	GHS08: health hazard 	H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.

No		Signal word	Pictograms	H phrases
23	10 % ≤ NiO < 25 %	Danger	GHS07: exclamation mark  GHS08: health hazard 	H317: May cause an allergic skin reaction. H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
24	NiO ≥ 25 %	Danger	GHS07: exclamation mark  GHS08: health hazard	H317: May cause an allergic skin reaction. H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

No		Signal word	Pictograms	H phrases
			 GHS09: environment 	H411: Toxic to aquatic life with long lasting effects.
25	0.05% ≤ Pb < 0.25% 0.1 % ≤ NiO < 1 %	Danger	GHS08: health hazard 	H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
26	0.05% ≤ Pb < 0.3% 1 % ≤ NiO < 10 %	Danger	GHS08: health hazard	H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H373: May cause damage to organs <or state

No		Signal word	Pictograms	H phrases
				all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
27	0.05% ≤ Pb < 0.3% NiO ≥ 10 %	Danger	GHS07: exclamation mark  GHS08: health hazard  GHS09: environment 	H317: May cause an allergic skin reaction. H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H411: Toxic to aquatic life with long lasting effects.

No		Signal word	Pictograms	H phrases
28	0.25% ≤ Pb < 0.3% 0.1 % ≤ NiO < 1 %	Danger	GHS08: health hazard 	H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
29	0.3% ≤ Pb < 0.5 %; 0.1 % ≤ NiO < 1 %	Danger	GHS08: health hazard 	H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that

No		Signal word	Pictograms	H phrases
				no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
30	0.3% ≤ Pb < 0.5 %; 1 % ≤ NiO < 10 %;	Danger	GHS08: health hazard 	H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
31	0.3% ≤ Pb < 0.5 %; NiO ≥ 10 %;	Danger	GHS07: exclamation mark	H317: May cause an allergic skin reaction. H350: May cause cancer <state route of exposure if it is conclusively proven that no

No		Signal word	Pictograms	H phrases
			 GHS08: health hazard  GHS09: environment 	other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H411: Toxic to aquatic life with long lasting effects.
32	0.5% ≤ Pb < 1 %; 0.1 % ≤ NiO < 1 %	Danger	GHS08: health hazard 	H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all

No		Signal word	Pictograms	H phrases
				organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
33	1% ≤ Pb < 2.5 %; 0.1 % ≤ NiO < 1 %	Danger	GHS08: health hazard  GHS09: environment 	H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H411: Toxic to aquatic life with long lasting effects.

No		Signal word	Pictograms	H phrases
34	0.5% ≤ Pb < 1 %; 1 % ≤ NiO < 10%	Danger	GHS08: health hazard 	H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
35	1% ≤ Pb < 2.5 %; NiO ≥ 10 %	Danger	GHS07: exclamation mark  GHS08: health hazard	H317: May cause an allergic skin reaction. H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the

No		Signal word	Pictograms	H phrases
			 GHS09: environment 	hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H411: Toxic to aquatic life with long lasting effects.
36	2.5 % ≤ Pb < 25 %; 0.1 % ≤ NiO < 10 %	Danger	GHS08: health hazard  GHS09: environment 	H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

No		Signal word	Pictograms	H phrases
				H400: Very toxic to aquatic life. H411: Toxic to aquatic life with long lasting effects.
37	2.5 % ≤ Pb < 25 %; NiO ≥ 10%	Danger	GHS07: exclamation mark  GHS08: health hazard  GHS09: environment 	H317: May cause an allergic skin reaction. H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H400: Very toxic to aquatic life. H411: Toxic to aquatic life with long lasting effects.
38	Pb ≥ 25 %; 0.1 % ≤ NiO < 10 %	Danger	GHS07: exclamation mark	H302+H332: Harmful if swallowed or if inhaled.

No		Signal word	Pictograms	H phrases
			 GHS08: health hazard  GHS09: environment 	H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H410: Very toxic to aquatic life with long lasting effects.
39	Pb ≥ 25 %; NiO ≥ 10%	Danger	GHS07: exclamation mark  GHS08: health hazard	H317: May cause an allergic skin reaction. H302+H332: Harmful if swallowed or if inhaled.H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the

No		Signal word	Pictograms	H phrases
			 GHS09: environment 	hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H410: Very toxic to aquatic life with long lasting effects.
40	1 % ≤ V2O5 < 3 %	Warning	GHS07: exclamation mark  GHS08: health hazard 	H319: Causes serious eye irritation. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
41	3 %≤ V2O5 <10 %	Danger	GHS05: corrosion	H318: Causes serious eye damage. H341: Suspected of causing genetic defects

No		Signal word	Pictograms	H phrases
			 GHS08: health hazard 	<state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H361: Suspected of damaging fertility or the unborn child <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
42	10 % ≤ V2O5 < 20 %	Danger	GHS05: corrosion  GHS08: health hazard 	H318: Causes serious eye damage. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H361: Suspected of damaging fertility or the unborn child <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the

No		Signal word	Pictograms	H phrases
				hazard>. H412: Harmful to aquatic life with long lasting effects.
43	20 % ≤ V2O5 <25 %	Danger	GHS05: corrosion  GHS07: exclamation mark  GHS08: health hazard 	H318: Causes serious eye damage. H335: May cause respiratory irritation. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H361: Suspected of damaging fertility or the unborn child <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.

No		Signal word	Pictograms	H phrases
44	V2O5 > 25 %	Danger	GHS05: corrosion  GHS07: exclamation mark  GHS08: health hazard  GHS09: environment 	H302+H332: Harmful if swallowed or if inhaled.H318: Causes serious eye damage. H335: May cause respiratory irritation. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H361: Suspected of damaging fertility or the unborn child <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H411: Toxic to aquatic life with long lasting effects.

No		Signal word	Pictograms	H phrases
45	1 % ≤ V2O5 < 3 %; 0.05% ≤ Pb < 0.3 %	Warning	GHS07: exclamation mark  GHS08: health hazard 	H319: Causes serious eye irritation. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
46	1 % ≤ V2O5 < 3 %; 0.3% ≤ Pb < 0.5 %	Danger	GHS07: exclamation mark  GHS08: health hazard	H319: Causes serious eye irritation. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H373: May cause damage to organs <or state

No		Signal word	Pictograms	H phrases
				all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
47	1 % ≤ V2O5 < 3 %; 0.5% ≤ Pb < 1 %	Danger	GHS07: exclamation mark  GHS08: health hazard 	H319: Causes serious eye irritation. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.

No		Signal word	Pictograms	H phrases
48	1 % ≤ V2O5 < 3 %; 1% ≤ Pb < 2.5 %	Danger	GHS07: exclamation mark  GHS08: health hazard  GHS09: environment 	H319: Causes serious eye irritation. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H411: Toxic to aquatic life with long lasting effects.
49	1 % ≤ V2O5 < 3 %; 2.5 % ≤ Pb < 25 %	Danger	GHS07: exclamation mark	H302+H332: Harmful if swallowed or if inhaled.H319: Causes serious eye irritation.

No		Signal word	Pictograms	H phrases
			 GHS08: health hazard  GHS09: environment 	H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H400: Very toxic to aquatic life. H411: Toxic to aquatic life with long lasting effects.
50	1 % ≤ V2O5 < 3 %; Pb ≥ 25 %	Danger	GHS07: exclamation mark	H302+H332: Harmful if swallowed or if inhaled.H319: Causes serious eye irritation. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively

No		Signal word	Pictograms	H phrases
			 GHS08: health hazard  GHS09: environment 	proven that no other routes of exposure cause the hazard>. H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H410: Very toxic to aquatic life with long lasting effects.
51	3 %≤ V2O5 <10 %; 0.05% ≤ Pb < 0.3 %	Danger	GHS05: corrosion 	H318: Causes serious eye damage. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H361: Suspected of damaging fertility or the

No		Signal word	Pictograms	H phrases
			GHS08: health hazard 	unborn child <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
52	3 %≤ V2O5 <10 %; 0.3% ≤ Pb < 0.5 %	Danger	GHS05: corrosion  GHS08: health hazard 	H318: Causes serious eye damage. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that

No		Signal word	Pictograms	H phrases
				no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
53	3 %≤ V2O5 <10 %; 0.5% ≤ Pb < 1 %	Danger	GHS05: corrosion  GHS08: health hazard 	H318: Causes serious eye damage. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
54	3 %≤ V2O5 <10 %; 1% ≤ Pb < 2.5 %	Danger	GHS05: corrosion	H318: Causes serious eye damage.

No		Signal word	Pictograms	H phrases
			 GHS08: health hazard  GHS09: environment 	H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H411: Toxic to aquatic life with long lasting effects.
55	3 %≤ V2O5 <10 %; 2.5 % ≤ Pb < 25 %	Danger	GHS05: corrosion	H302+H332: Harmful if swallowed or if inhaled.H318: Causes serious eye damage. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure

No		Signal word	Pictograms	H phrases
			 GHS07: exclamation mark  GHS08: health hazard  GHS09: environment 	cause the hazard>. H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H400: Very toxic to aquatic life. H411: Toxic to aquatic life with long lasting effects.
56	3 %≤ V2O5 <10 %; Pb ≥ 25 %	Danger	GHS05: corrosion	H302+H332: Harmful if swallowed or if inhaled.H318: Causes serious eye damage. H341: Suspected of causing genetic defects

No		Signal word	Pictograms	H phrases
			 GHS07: exclamation mark  GHS08: health hazard  GHS09: environment 	<state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H410: Very toxic to aquatic life with long lasting effects.
57	10 % ≤ V2O5 < 20 %; 0.05% ≤ Pb < 0.3 %	Danger	GHS05: corrosion	H318: Causes serious eye damage. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively

No		Signal word	Pictograms	H phrases
			 GHS08: health hazard 	proven that no other routes of exposure cause the hazard>. H361: Suspected of damaging fertility or the unborn child <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
58	10 % ≤ V2O5 < 20 %; 0.3% ≤ Pb < 0.5 %	Danger	GHS05: corrosion  GHS08: health hazard	H318: Causes serious eye damage. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

No		Signal word	Pictograms	H phrases
				H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H412: Harmful to aquatic life with long lasting effects.
59	10 % ≤ V2O5 < 20 %; 0.5% ≤ Pb < 1 %	Danger	GHS05: corrosion  GHS08: health hazard  GHS09: environment	H318: Causes serious eye damage. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H411: Toxic to aquatic life with long lasting

No		Signal word	Pictograms	H phrases
				effects.
60	10 % ≤ V2O5 < 20 %; 1% ≤ Pb < 2.5 %	Danger	GHS05: corrosion  GHS08: health hazard  GHS09: environment 	H318: Causes serious eye damage. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H411: Toxic to aquatic life with long lasting

No		Signal word	Pictograms	H phrases
				effects.
61	10 % ≤ V2O5 < 20 %; 2.5 % ≤ Pb < 25 %	Danger	GHS05: corrosion  GHS07: exclamation mark  GHS08: health hazard  GHS09: environment 	H302+H332: Harmful if swallowed or if inhaled.H318: Causes serious eye damage. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H400: Very toxic to aquatic life. H411: Toxic to aquatic life with long lasting

No		Signal word	Pictograms	H phrases
				effects.
62	10 % ≤ V2O5 < 20 %; Pb ≥ 25 %	Danger	GHS05: corrosion  GHS07: exclamation mark  GHS08: health hazard  GHS09: environment 	H302+H332: Harmful if swallowed or if inhaled.H318: Causes serious eye damage. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H410: Very toxic to aquatic life with long lasting effects.

No		Signal word	Pictograms	H phrases
63	20 % ≤ V2O5 <25 %; 0.05% ≤ Pb < 0.3 %	Danger	GHS05: corrosion  GHS07: exclamation mark  GHS08: health hazard  GHS09: environment 	H302+H332: Harmful if swallowed or if inhaled.H318: Causes serious eye damage. H335: May cause respiratory irritation. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H361: Suspected of damaging fertility or the unborn child <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H411: Toxic to aquatic life with long lasting effects.

No		Signal word	Pictograms	H phrases
64	20 % ≤ V2O5 <25 %; 0.3% ≤ Pb < 0.5 %	Danger	GHS05: corrosion  GHS07: exclamation mark  GHS08: health hazard  GHS09: environment 	H302+H332: Harmful if swallowed or if inhaled.H318: Causes serious eye damage. H335: May cause respiratory irritation. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H411: Toxic to aquatic life with long lasting effects.

No		Signal word	Pictograms	H phrases
65	20 % ≤ V2O5 <25 %; 0.5% ≤ Pb < 1 %	Danger	GHS05: corrosion  GHS07: exclamation mark  GHS08: health hazard  GHS09: environment 	H302+H332: Harmful if swallowed or if inhaled.H318: Causes serious eye damage. H335: May cause respiratory irritation. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H411: Toxic to aquatic life with long lasting effects.

No		Signal word	Pictograms	H phrases
66	20 % ≤ V2O5 <25 %; 1% ≤ Pb < 2.5 %	Danger	GHS05: corrosion  GHS07: exclamation mark  GHS08: health hazard  GHS09: environment 	H302+H332: Harmful if swallowed or if inhaled.H318: Causes serious eye damage. H335: May cause respiratory irritation. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H411: Toxic to aquatic life with long lasting effects.

No		Signal word	Pictograms	H phrases
67	20 % ≤ V2O5 <25 %; 2.5 % ≤ Pb < 25 %	Danger	GHS05: corrosion  GHS07: exclamation mark  GHS08: health hazard  GHS09: environment 	H302+H332: Harmful if swallowed or if inhaled.H318: Causes serious eye damage. H335: May cause respiratory irritation. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H400: Very toxic to aquatic life. H411: Toxic to aquatic life with long lasting

No		Signal word	Pictograms	H phrases
				effects.
68	20 % ≤ V2O5 <25 %; Pb ≥ 25 %	Danger	GHS05: corrosion  GHS07: exclamation mark  GHS08: health hazard  GHS09: environment 	H302+H332: Harmful if swallowed or if inhaled.H318: Causes serious eye damage. H335: May cause respiratory irritation. H341: Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. H360: May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. H410: Very toxic to aquatic life with long lasting effects.

No		Signal word	Pictograms	H phrases

PNEC values

PNEC	Lead	Cadmium	Nickel	Vanadium
PNEC freshwater (µg/L)	5.6	0.19	3.6	8
PNEC marine water (µg/L)	3.4	1.14	8.6	2.5
PNEC STP (µg/L)	100	20	0.33	5
PNEC sediment freshwater (mg/kg dw)	174	1.8	PNEC sediment: Pending outcome of sediment testing program	160
PNEC sediment marine water (mg/kg dw)	164	0.64	PNEC sediment: Pending outcome of sediment testing program	50
PNEC terrestrial (mg/kg dw)	147	0.9	29.9	0.3
PNEC oral (mg/kg food)	10.9	0.16	2.3	The PNEC oral does not need to be calculated as vanadium has a low potential for bioaccumulation (measured BCF fish 25.5).

Worker DNELs

Route	Type of effect	Lead	Cadmium	Nickel	Vanadium
Inhalation	Systemic Long Term	40 µg/dL Adult worker 10 µg/dL Adult female worker	4 µg/m³	0.05 mg/m³	0.009 mg/m³
	Systemic Acute		Not needed	520 mg/m³	Not needed
	Local Long Term		Not needed	0.05 mg/m³	Not needed
	Local Acute		Not needed	3.9 mg/m³	Not needed
Dermal	Systemic Long Term		Not needed	Not needed	Not needed
	Systemic Acute		Not needed	Not needed	Not needed
	Local Long Term		Not needed	0.024 mg/cm²	Not needed
	Local Acute		Not needed	Not needed	Not needed
Eye	Local		Not needed	Not needed	Not needed
Oral	Systemic		1 µg/kg bw/day	Not needed	Not needed

General Population DNELs

Route	Type of effect	Lead	Cadmium	Nickel	Vanadium
Inhalation	Systemic Long Term	Not needed	Not needed	20 ng/m³	Not needed
	Systemic Acute	Not needed	Not needed	312 mg/m³	Not needed
	Local Long Term	Not needed	Not needed	20 ng/m³	Not needed
	Local Acute	Not needed	Not needed	3.9 mg/m³	Not needed
Dermal	Systemic Long Term	Not needed	Not needed	Not needed	Not needed
	Systemic Acute	Not needed	Not needed	Not needed	Not needed
	Local Long Term	Not needed	Not needed	Not needed	Not needed
	Local Acute	Not needed	Not needed	Not needed	Not needed
Eye	Local	Not needed	Not needed	Not needed	Not needed
Oral	Systemic	Not needed	1 µg/kg bw/day	Not needed	8.2 µg/kg bw/day