Lead REACH CONSORTIUM

Name: Lead, dross (Boundary Composition)
Substance: Lead, dross
EC Number: 273-796-2
CAS Number: 69029-52-3
Substance Type: UVCB
Degree of purity: 100 % (w/w)
SIP description: 'Lead, dross' is a solid in granular or particulate form. It is produced by chemical reactions during the cooling of molten lead bullion in air in kettles and skimming the resultant precipitate surface layer. 'Lead, dross' is composed primarily of lead oxides and may contain significant levels of oxides of antimony, tin, zinc and copper, as well as metal sulphides and/or some elements in metallic form.

Elemental composition:

Constituents	Typical concentration	Concentration range	Remarks
Lead EC no.: 231-100-4	≤ 98.2 % (w/w)	Min. 5% (w/w)	Refers to % element. Pb is generally present in the form of compounds such as oxides (e.g. Na2PbO3, PbZnO, PbSbO, PbSnO) and/or sulphides (e.g. PbS), and may also be present in metallic form.
Antimony EC no.: 231-146-5	≤ 12.5 % (w/w)	≥ 0 — ≤ 49 % (w/w)	Refers to % element. Sb is generally present in the form of an alloy (e.g. Cu3Sb) or in the form of compounds such as oxides (e.g. PbSbO).
Tin EC no.: 231-141-8	≤ 12.5 % (w/w)	≥ 0 — ≤ 45 % (w/w)	Refers to % element. Sn is generally present in the oxide form (e.g. SnO2, PbSnO).
Zinc EC no.: 231-175-3	≤ 35 % (w/w)	≥ 0 — ≤ 43 % (w/w)	Refers to % element. Zn is generally present in the oxide form (e.g. PbZnO, ZnO).
Sulfur EC no.: 231-722-6	≤ 6.3 % (w/w)	≥ 0 — ≤ 27 % (w/w)	Refers to % element. S is generally present in the form of sulphides (e.g. PbS, CuFeS2, Cu5FeS4, FeS2) and/or sulphates (e.g. (Fe,Cu)SO4).
Copper EC no.: 231-159-6	≤ 20 % (w/w)	≥ 0 — ≤ 20 % (w/w)	Refers to % element. Cu is generally present in the form of an alloy (e.g. Cu3Sb) or in the form of compounds such as sulphides (e.g. CuFeS2, Cu5FeS4) and sulphates (e.g. (Fe,Cu)SO4).
Iron EC no.: 231-096-4	≤ 8.4 % (w/w)	≥ 0 — ≤ 14 % (w/w)	Refers to % element. Fe is

Constituents	Typical concentration	Concentration range	Remarks
			generally present in the metallic form or in the form of compounds such as oxides (e.g. PbAsFeO), sulphides (e.g. CuFeS2, FeS2, Cu5FeS4) and/or sulphates (e.g. (Fe,Cu)SO4).
Magnesium EC no.: 231-104-6	≤ 8.8 % (w/w)	≥ 0 — ≤ 28 % (w/w)	Refers to % element. Mg is generally present in the oxide form (e.g. (Mg,Ca,Na,Pb,Zn)O).
Sodium EC no.: 231-132-9	≤ 9.25 % (w/w)	≥ 0 — ≤ 25 % (w/w)	Refers to % element. Na is generally present in the hydroxide form (e.g. NaOH).
Bismuth EC no.: 231-177-4	≤ 5.1 % (w/w)	≥ 0 — ≤ 20 % (w/w)	Refers to % element. Bi is assumed to be present in the oxide form.
Tellurium EC no.: 236-813-4	≤ 7.5 % (w/w)	≥ 0 — ≤ 15 % (w/w)	Refers to % element. Te is assumed to be present in the oxide form.
Arsenic EC no.: 231-148-6	≤ 10 % (w/w)	≥ 0 — ≤ 15 % (w/w)	Refers to % element. As is generally present in the oxide form (e.g. PbAsFeO).
Manganese EC no.: 231-105-1	≤ 12.4 % (w/w)	≥ 0 — ≤ 13 % (w/w)	Refers to % element. Mn is assumed to be present in the oxide form.
Calcium EC no.: 231-179-5	≤ 3.9 % (w/w)	≥ 0 — ≤ 12.5 % (w/w)	Refers to % element. Ca is generally present in the oxide form (e.g. (Mg,Ca,Na,Pb,Zn)O, CaO2*8H2O) or in the form of an alloy (e.g. SbNiCoCa).
Cadmium EC no.: 231-152-8	≤ 5 % (w/w)	≥ 0 — ≤ 10 % (w/w)	Refers to % element. Cd is assumed to be present in the oxide form.
Nickel EC no.: 231-111-4	≤ 5 % (w/w)	≥ 0 — ≤ 10 % (w/w)	Refers to % element. Ni is generally present in the form of an alloy (e.g. SbNiCoCa).
Silver EC no.: 231-131-3	≤ 5.9 % (w/w)	≥ 0 — ≤ 10 % (w/w)	Refers to % element. Ag is generally present in the metallic form.
Potassium EC no.: 231-119-8	≤ 7.35 % (w/w)	≥ 0 — ≤ 8 % (w/w)	Refers to % element. K is assumed to be present in the oxide form.
Aluminium EC no.: 231-072-3	≤ 2.14 % (w/w)	≥ 0 — ≤ 3 % (w/w)	Refers to % element. Al is assumed to be present in the oxide form.
Silicon EC no.: 231-130-8	≤ 0.9 % (w/w)	≥ 0 — ≤ 1.5 % (w/w)	Refers to % element. Si is generally present in the silicate form (e.g. PbSiO).
Chromium EC no.: 231-157-5	≤ 0.11 % (w/w)	≥ 0 — ≤ 0.2 % (w/w)	Refers to % element. Cr is assumed to be present in the oxide form.
Selenium EC no.: 231-957-4	≤ 0.05 % (w/w)	≥ 0 — ≤ 0.15 % (w/w)	Refers to % element. Se is assumed to be present in the oxide form.

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Cobalt EC.: 231-158-0	≤ 0.01 % (w/w)	≥ 0 — ≤ 0.01 % (w/w)	Refers to % element. Co is generally present in the form of an alloy (e.g. SbNiCoCa).

Classification:

Industry self-classification according to Classification Labelling and Packaging Regulation EC 1272/2008:

CLP
Acute Tox. 2; H300: Fatal if swallowed.
Acute Tox. 3; H331: Toxic if inhaled.
Skin Corr. 1B; H314: Causes severe skin burns and eye damage.
Skin Sens. 1B; H317: May cause an allergic skin reaction.
Eye Dam. 1; H318: Causes serious eye damage.
Muta. 2; H341: Suspected of causing genetic defects.
Carc. 1A; H350: May cause cancer.
Repr. 1A; H360FD: May damage fertility. May damage the unborn child.
Lact. H362: May cause harm to breast-fed children.
STOT Rep. Exp. 1; H372: Causes damage to organs through prolonged or repeated exposure.
Aquatic Acute 1; H400: Very toxic to aquatic life.
Aquatic Chronic 1; H410: Very toxic to aquatic life with long lasting effects.

Labelling:

Signal word: Danger

Hazard pictograms:

GHS05: Corrosion

GHS08: health hazard

GHS06: Skull and crossbones

GHS09: environment

Hazard statements:

H300	Fatal if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H331	Toxic if inhaled.

H341	Suspected of causing genetic defects.
H350	May cause cancer.
H360FD	May damage fertility. May damage the unborn child.
H362	May cause harm to breast-fed children.
H372	Causes damage to central nervous system, blood and kidneys through prolonged or repeated exposure by inhalation or ingestion.
H410	Very toxic to aquatic life with long lasting effects.

Disclaimer