



Lead REACH
CONSORTIUM

Grade name:	Lead, dross, copper rich
Substance:	Lead, dross, copper rich
EC Number:	273-925-2
CAS Number:	69227-11-8
Substance Type:	UVCB
Degree of purity:	100 % (w/w)
Description of Product:	Lead, dross, copper rich is a solid phase formed during the removal of copper from molten lead during the pyrometallurgical refining of both primary and secondary lead bullion. Lead dross, copper rich consists of variable amounts of lead, copper and other metals in either alloy form or as compounds such as oxides.

Composition:

Constituents	Typical concentration	Concentration range	Remarks
Lead EC no.: 231-100-4	<= 93.19 % (w/w)	>= 10 — <= 95% (w/w)	Refers to % element. In general Pb is mainly present in the metallic form and may also be present in the form of compounds such as sulphides (e.g. PbS, PbCuS), oxides (e.g. PbO, PbSb ₂ O ₆ , SnPbNaO) and in the form of an alloy (e.g. PbMoSe).
Copper EC no.: 231-159-6	<= 17.3 % (w/w)	>= 0 — <= 50 % (w/w)	Refers to % element. In general Cu is mainly present in the sulphide form (e.g. Cu ₂ S, CuFeS ₂ , PbCuS) and may also be present in the form of other compounds such as oxides (e.g. ZnCuAgO) and/or in the form of alloys (e.g. Cu ₃ (Sn,Sb) and/or in the form of arsenides (e.g. CuAs).
Sulfur EC no.: 231-722-6	<= 15 % (w/w)	>= 0 — <= 30 % (w/w)	Refers to % element. S is generally present in the form of sulphides (e.g. PbS, CuFeS ₂ , CdS) and may also be present in the form of sulphates (e.g. ZnSO ₄).
Zinc EC no.: 231-175-3	<= 2 % (w/w)	>= 0 — <= 10 % (w/w)	Refers to % element. Zn is generally present in the form of compounds such as sulphides (e.g. ZnS, ZnSe(Mo,Cd)S) and/or oxides (e.g. ZnCuAgO), hydroxides (e.g. ZnOH) and sulphates (e.g. ZnSO ₄).
Cadmium EC no.: 231-152-8	<= 0.83 % (w/w)	>= 0 — <= 4 % (w/w)	Refers to % element. Cd is generally present in the sulphide form (e.g. ZnSe(Mo,Cd)S, CdS).

Constituents	Typical concentration	Concentration range	Remarks
Iron EC no.: 231-096-4	<= 9.77 % (w/w)	>= 0 — <= 12.5 % (w/w)	Refers to % element. Fe is generally present in the oxide form (e.g. FeZnOxide, Fe ₃ O ₄) and may also be present in the form of other compounds such as sulphides (e.g. FeS ₂ , CuFeS ₂) and/or in the form of arsenides (e.g. CuAs).
Cobalt EC no.: 231-158-0	<= 0.116 % (w/w)	>= 0 — <= 1 % (w/w)	Refers to % element. Co is assumed to be present in the oxide form.
Nickel EC no.: 231-111-4	<= 2.17 % (w/w)	>= 0 — <= 2.5 % (w/w)	Refers to % element. Ni is generally present in the form of an alloy (e.g. SbNiAs, SnNiSb, NiSbSnAg).
Silver EC no.: 231-131-3	<= 0.906 % (w/w)	>= 0 — <= 5 % (w/w)	Refers to % element. Ag is generally present in the form of an alloy (e.g. AgSn, NiSbSnAg).
Antimony EC no.: 231-146-5	<= 11 % (w/w)	>= 0 — <= 20 % (w/w)	Refers to % element. Sb is generally present in the form of an alloy (e.g. SbNiAs, SnNiSb, NiSbSnAg) and may also be present in the oxide form (e.g. PbSbAsO, PbSb ₂ O ₆).
Arsenic EC no.: 231-148-6	<= 4.92 % (w/w)	>= 0 — <= 10 % (w/w)	Refers to % element. As is generally present in the form of an alloy (e.g. SbNiAs) and in the oxide form (e.g. PbSbAsO) and/or in the form of arsenides (e.g. CuAs, FeAs).
Bismuth EC no.: 231-177-4	<= 0.45 % (w/w)	>= 0 — <= 1 % (w/w)	Refers to % element. Bi is generally present in the metallic form.
Tin EC no.: 231-141-8	<= 9.24 % (w/w)	>= 0 — <= 40 % (w/w)	Refers to % element. Sn is generally present in the oxide form (e.g. SnPbNaO, SnNaO) and/or in the form of an alloy (e.g. SnNiSb, Cu ₃ (Sn,Sb), AgSn, NiSbSnAg).
Selenium EC no.: 231-957-4	<= 1.21 % (w/w)	>= 0 — <= 3 % (w/w)	Refers to % element. Se is generally present in the form of an alloy (e.g. PbMoSe) or in the form of a compound (e.g. ZnSe(Mo,Cd)S).
Tellurium EC no.: 236-813-4	<= 2.49 % (w/w)	>= 0 — <= 3.5 % (w/w)	Refers to % element. Te is assumed to be present in the oxide form.
Aluminium EC no.: 231-072-3	<= 0.1 % (w/w)	>= 0 — <= 2 % (w/w)	Refers to % element. Al is assumed to be present in the form of a compound.
Manganese EC no.: 231-105-1	<= 0.1 % (w/w)	>= 0 — <= 0.5 % (w/w)	Refers to % element. Mn is assumed to be present in the oxide form.
Silicon EC no.: 231-130-8	<= 0.6 % (w/w)	>= 0 — <= 2.5 % (w/w)	Refers to % element. Si is generally present in the form of silicates (e.g. SiO ₂).

Constituents	Typical concentration	Concentration range	Remarks
Potassium EC no.: 231-119-8	<= 0.48 % (w/w)	>= 0 — <= 0.5 % (w/w)	Refers to % element. K is assumed to be present in the form of a compound.
Sodium EC no.: 231-132-9	<= 1.33 % (w/w)	>= 0 — <= 2 % (w/w)	Refers to % element. Na is generally present in the oxide form (e.g. SnPbNaO, SnNaO).
Magnesium EC no.: 231-104-6	<= 0.4 % (w/w)	>= 0 — <= 12 % (w/w)	Refers to % element. Mg is assumed to be present in the form of a compound.
Calcium EC no.: 231-179-5	<= 0.6 % (w/w)	>= 0 — <= 2.5 % (w/w)	Refers to % element. Ca is assumed to be present in the form of a compound.

Classification:

Industry classification proposals - In line with the latest scientific data and knowledge, Industry proposes to classify *lead, dross, copper rich* as follows:

Acute Tox. 4; H302: Harmful if swallowed.

Acute Tox. 4; H332: Harmful if inhaled.

Skin Sens. 1; H317: May cause an allergic skin reaction.

Repr. 1A; H360FD: May damage fertility. May damage the unborn child.

Carc. 1B; H350: May cause cancer.

STOT Rep. Exp. 1; H372: Causes damage to organs through prolonged or repeated exposure.

Aquatic Chronic 1; H410: Very toxic to aquatic life with long lasting effects.

Aquatic Acute 1; H400: Very toxic to aquatic life.

Labelling:

Signal word: Danger

Hazard pictograms:

GHS07: exclamation mark



GHS08: health hazard



GHS09: environment



Hazard statements:

H302	Harmful if swallowed.
H332	Harmful if inhaled.
H317	May cause an allergic skin reaction.
H350	May cause cancer.
H360FD	May damage fertility. May damage the unborn child.
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

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