



Lead REACH
CONSORTIUM

Grade name:	Lead, dross (general grade)
Substance:	Lead, dross
EC Number:	273-796-2
CAS Number:	69029-52-3
Substance Type:	UVCB
Degree of purity:	100 % (w/w)
Description of Product:	Lead, dross is a solid mass which forms on top of molten lead during the refining process. Lead dross consists of variable amounts of lead, copper, zinc, tin, antimony and other metals in either alloy form or as compounds such as oxides, sulphides and sulphates.

Composition:

Constituents	Typical concentration	Concentration range	Remarks
Lead EC no.: 231-100-4	<= 94.5 % (w/w)	>= 5 — <= 95 % (w/w)	Refers to % element. Pb is generally present in the metallic form and in the form of compounds such as oxides (e.g. Na ₂ PbO ₃ , PbZnO, PbSbO, PbSnO) and/or sulphides (e.g. PbS).
Copper EC no.: 231-159-6	<= 19.5 % (w/w)	>= 0 — <= 20 % (w/w)	Refers to % element. Cu is generally present in the form of an alloy (e.g. Cu ₃ Sb) or in the form of compounds such as sulphides (e.g. CuFeS ₂ , Cu ₅ FeS ₄) and sulphates (e.g. (Fe,Cu)SO ₄).
Cadmium EC no.: 231-152-8	<= 0.085 % (w/w)	>= 0 — <= 10 % (w/w)	Refers to % element. Cd is assumed to be present in the oxide form.
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	<= 6.34 % (w/w)	>= 0 — <= 27 % (w/w)	Refers to % element. S is generally present in the form of sulphides (e.g. PbS, CuFeS ₂ , Cu ₅ FeS ₄ , FeS ₂) and/or sulphates (e.g. (Fe,Cu)SO ₄).
Iron EC no.: 231-096-4	<= 8.38 % (w/w)	>= 0 — <= 14 % (w/w)	Refers to % element. Fe is generally present in the metallic form or in the form of compounds such as oxides (e.g. PbAsFeO), sulphides (e.g. CuFeS ₂ , FeS ₂ , Cu ₅ FeS ₄) and/or sulphates (e.g. (Fe,Cu)SO ₄).
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

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			an alloy (e.g. SbNiCoCa).
Silver EC no.: 231-131-3	<= 5.92 % (w/w)	>= 0 — <= 10 % (w/w)	Refers to % element. Ag is generally present in the 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).
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).
Bismuth EC no.: 231-177-4	<= 5.13 % (w/w)	>= 0 — <= 10 % (w/w)	Refers to % element. Bi is assumed to be present in the oxide form.
Tin EC no.: 231-141-8	<= 12.5 % (w/w)	>= 0 — <= 25 % (w/w)	Refers to % element. Sn is generally present in the oxide form (e.g. SnO2, PbSnO).
Selenium EC no.: 231-957-4	<= 0.15 % (w/w)	>= 0 — <= 0.2 % (w/w)	Refers to % element. Se 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.
Aluminium EC no.: 231-072-3	<= 0.5 % (w/w)	>= 0 — <= 3 % (w/w)	Refers to % element. Al is assumed to be present in the oxide form.
Indium EC no.: 231-180-0	<= 7.5 % (w/w)	>= 0 — <= 15 % (w/w)	Refers to % element. In is assumed to be present in the oxide form.
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.
Manganese EC no.: 231-105-1	<= 0.8 % (w/w)	>= 0 — <= 7 % (w/w)	Refers to % element. Mn is assumed to be present in the oxide form.
Silicon EC no.: 231-130-8	<= 0.89 % (w/w)	>= 0 — <= 1.5 % (w/w)	Refers to % element. Si is generally present in the silicate form (e.g. PbSiO).
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).
Potassium EC no.: 231-119-8	<= 0.25 % (w/w)	>= 0 — <= 1 % (w/w)	Refers to % element. K is assumed to be present in the oxide form.
Magnesium EC no.: 231-104-6	<= 8.82 % (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).
Calcium EC no.: 231-179-5	<= 3.85 % (w/w)	>= 0 — <= 12 % (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).
Titanium	<= 0.5 % (w/w)	>= 0 — <= 1 % (w/w)	Refers to % element. Ti is

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EC no.: 231-142-3			assumed to be present in the oxide form.
Chlorine EC no.: 231-959-5	<= 7.5 % (w/w)	>= 0 — <= 15 % (w/w)	Refers to % element. Cl is assumed to be present in the form of a compound.
Nickel EC no.: 231-111-4	<= 0.995 % (w/w)	>= 0 — <= 10 % (w/w)	Refers to % element. Ni is generally present in the form of an alloy (e.g. SbNiCoCa).

Classification:

Dangerous Substances Directive 67/548/EEC - Not classified as hazardous.

Classification Labelling and Packaging Regulation EC 1272/2008 - Not classified as hazardous.

Industry classification proposals - Industry proposes to classify lead, dross (general grade) to bring it into line with the latest scientific data and knowledge. The proposed classification will be:

DSD

T+; R28: Very Toxic if swallowed.

Xn; R20: Harmful by inhalation.

T; R48/23/25: Toxic: danger of serious damage to health by prolonged exposure through inhalation, and if swallowed.

Xi; R36/37/38: Irritating to eyes, respiratory system and skin.

C; R35: Causes severe burns.

Carc. Cat. 1; R45: May cause cancer.

Repr. Cat. 1; R60: May impair fertility.

Repr. Cat. 1; R61: May cause harm to the unborn child.

N; R50/53: Dangerous for the environment; Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CLP

Acute Tox. 2; H300: Fatal if swallowed.

Acute Tox. 4; H332: Harmful if inhaled.

Skin Corr. 1A; H314: Causes severe skin burns and eye damage.

Eye Dam. 1; H318: Causes serious eye damage.

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

Carc. 1A; 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:

GHS05: Corrosion



GHS06: Skull and crossbones



GHS08: health hazard



GHS09: environment



Hazard statements:

H300	Fatal if swallowed.
H332	Harmful if inhaled.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
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.

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