



<b>Grade name:</b>	Lead, dross, bismuth rich
<b>Substance:</b>	Lead, dross, bismuth rich
<b>EC Number:</b>	273-792-0
<b>CAS Number:</b>	69029-46-5
<b>Substance Type:</b>	UVCB
<b>Degree of purity:</b>	100 % (w/w)
<b>Description of Product:</b>	'Lead, dross, bismuth rich' is a solid in massive form (coarse chunks) at 20°C, 1013 hPa. It is manufactured by the addition of calcium and/or magnesium to the molten lead bullion bath, via the Kroll-Betterton process. 'Lead, dross, bismuth rich' is generally oxidic but may also contain metallic/intermetallic forms.

**Composition:**

Constituents	Typical concentration	Concentration range	Remarks
Lead EC no.: 231-100-4	≤ 87 % (w/w)	≥ 22 — ≤ 95% (w/w)	Refers to % element. Pb is generally present in the oxide form (e.g. PbO, Bi(Na,Pb)O, MgPbCa-oxide); it may also be present in metallic form and in other intermetallic/oxidic forms (e.g. PbSi2O6, PbCa).
Bismuth EC no.: 231-177-4	≤ 15 % (w/w)	≥ 0.2 — ≤ 41 % (w/w)	Refers to % element. Bi is generally present in the oxide form (BiO, Bi(Na,Pb)O) and may also be present in the metallic form.
Magnesium EC no.: 231-104-6	≤ 9 % (w/w)	≥ 0 — ≤ 25 % (w/w)	Refers to % element. Mg is generally present in the hydroxide form (e.g. Mg(Pb,Ca)OH).
Calcium EC no.: 231-179-5	≤ 6 % (w/w)	≥ 0 — ≤ 14 % (w/w)	Refers to % element. Ca is generally present in the hydroxide form (e.g. Mg(Pb,Ca)OH) or in another compound form (e.g. PbCa).
Sodium EC no.: 231-132-9	≤ 13.5 % (w/w)	≥ 0 — ≤ 14 % (w/w)	Refers to % element. In general Na is mainly present in the oxide form (e.g. Bi(Na,Pb)O) and may also be present in the hydroxide form.
Antimony EC no.: 231-146-5	≤ 2.75 % (w/w)	≥ 0 — ≤ 5 % (w/w)	Refers to % element. Sb is assumed to be present in the oxide form.
Zinc EC no.: 231-175-3	≤ 1.79 % (w/w)	≥ 0 — ≤ 2 % (w/w)	Refers to % element. Zn is assumed to be present in the oxide form.

Constituents	Typical concentration	Concentration range	Remarks
Iron EC no.: 231-096-4	≤ 0.54% (w/w)	≥ 0 — ≤ 1 % (w/w)	Refers to % element. Fe is assumed to be present in the oxide form.
Silicon EC no.: 231-130-8	≤ 0.5 % (w/w)	≥ 0 — ≤ 0.5 % (w/w)	Refers to % element. Si is generally present in the silicate form (e.g. PbSi2O6).
Sulphur EC no.: 231-722-6	≤ 0.5 % (w/w)	≥ 0 — ≤ 0.5 % (w/w)	Refers to % element. S is assumed to be present in the form of a compound.
Arsenic EC no.: 231-148-6	≤ 0.38 % (w/w)	≥ 0 — ≤ 0.5 % (w/w)	Refers to % element. As is assumed to be present in the oxide form.
Copper EC no.: 231-159-6	≤ 0.22 % (w/w)	≥ 0 — ≤ 0.5 % (w/w)	Refers to % element. Cu is assumed to be present in the oxide form.
Potassium EC no.: 231-119-8	≤ 0.127 % (w/w)	≥ 0 — ≤ 0.2 % (w/w)	Refers to % element. K is assumed to be present in the oxide form.
Aluminium EC no.: 231-072-3	≤ 0.1 % (w/w)	≥ 0 — ≤ 0.5 % (w/w)	Refers to % element. Al is assumed to be present in the oxide form.
Tellurium EC no.: 236-813-4	≤ 0.021 % (w/w)	≥ 0 — ≤ 0.5 % (w/w)	Refers to % element. Te is assumed to be present in the oxide form.
Silver EC no.: 231-131-3	≤ 0.011 % (w/w)	≥ 0 — ≤ 1 % (w/w)	Refers to % element. Ag is assumed to be present in the oxide form.
Tin EC no.: 231-141-8	≤ 0.008 % (w/w)	≥ 0 — ≤ 0.2 % (w/w)	Refers to % element. Sn is assumed to be present in the oxide form.
Other impurities not affecting classification	< 0.1 % (w/w)	≥ 0 — <0.1 % (w/w)	

**Classification:****Industry self-classification in accordance with the Classification Labelling and Packaging Regulation EC 1272/2008 (CLP)****CLP**

Acute Tox. 4; H302: Harmful 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.

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



GHS07: exclamation mark



GHS09: environment



Hazard statements:

H302	Harmful 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.
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.

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