Grade name: Lead bullion (Grade 4 – low As, Cd, Ni, Sb)
Substance: Lead, bullion
EC Number: 308-011-5
CAS Number: 97808-88-3
Substance Type: UVCB
Degree of purity: 100 % (w/w)
Description of Product: "Lead, bullion" is a solid in massive form (at 20°C, 1013 hPa), produced by smelting primary and/or secondary lead-containing feeds and requiring subsequent refining. "Lead, bullion" is composed primarily of metallic lead and may contain other intermetallic phases (in particular tin, as well as copper, antimony, arsenic, bismuth).

Composition:

Constituents	Typical concentration	Concentration range	Remarks
Lead EC no.: 231-100-4	<= 98.9 % (w/w)	Min. 30% (w/w)	Refers to % element. Pb is generally present in the metallic form. Sometimes Pb may also be present in the oxide form (e.g. PbO).
Antimony EC no.: 231-146-5	<= 13 % (w/w)	>= 0 — <= 13 % (w/w)	Refers to % element. Sb is generally present in the form of an alloy (e.g. SbCdZn, SbSn, SbSnAsCd) and may also be present in the metallic form.
Copper EC no.: 231-159-6	<= 20 % (w/w)	>= 0 — <= 40 % (w/w)	Refers to % element. Cu is generally present in the form of an alloy (e.g. Cu3Sn) and in sulphide form (e.g. Cu2S).
Tin EC no.: 231-141-8	<= 41.9 % (w/w)	>= 0 — <= 56 % (w/w)	Refers to % element. Sn is generally present in the form of an alloy (e.g. SbSn, Cu3Sn, SbSnAsCd, AgSn) or in the metallic form.
Arsenic EC no.: 231-148-6	<= 0.09 % (w/w)	>= 0 — <= 0.09 % (w/w)	Refers to % element. As is generally present in the form of an alloy (e.g. SbSnAsCd).
Bismuth EC no.: 231-177-4	<= 5 % (w/w)	>= 0 — <= 17 % (w/w)	Refers to % element. Bi is assumed to be present in the metallic form.
Zinc EC no.: 231-175-3	<= 15 % (w/w)	>= 0 — <= 30 % (w/w)	Refers to % element. Zn is generally present in the form of an alloy (e.g. SbSnAsCd, SbCdZn).
Iron EC no.: 231-096-4	<= 15 % (w/w)	>= 0 — <= 30 % (w/w)	Refers to % element. Fe is assumed to be present in the

Constituents	Typical concentration	Concentration range	Remarks
			form of an alloy.
Silver EC no.: 231-131-3	<= 5 % (w/w)	>= 0 — <= 10 % (w/w)	Refers to % element. Ag is generally present in the form of an alloy (e.g. AgSn).
Gold EC no.: 231-165-9	<= 5 % (w/w)	>= 0 — <= 10 % (w/w)	Refers to % element. Au is assumed to be present in the metallic form.
Aluminium EC no.: 231-072-3	<= 5 % (w/w)	>= 0 — <= 10 % (w/w)	Refers to % element. Al is assumed to be present in the form of an alloy.
Silicon EC no.: 231-130-8	<= 1.5 % (w/w)	>= 0 — <= 3 % (w/w)	Refers to % element. Si is assumed to be present in the form of an alloy.
Cadmium EC no.: 231-152-8	<= 0.09 % (w/w)	>= 0 — <= 0.09 % (w/w)	Refers to % element. Cd is generally present in the form of an alloy (e.g. SbSnAsCd, SbCdZn).
Nickel EC no.: 231-111-4	<= 0.2 % (w/w)	>= 0 — <= 0.7 % (w/w)	Refers to % element. Ni is assumed to be present in the metallic form.
Indium EC no.: 231-180-0	<= 5 % (w/w)	>= 0 — <= 10 % (w/w)	Refers to % element. In is assumed to be present in the metallic form.
Selenium EC no.: 231-957-4	<= 0.05 % (w/w)	>= 0 — <= 0.1 % (w/w)	Refers to % element. Se is assumed to be present in the metallic form.
Tellurium EC no.: 236-813-4	<= 0.23 % (w/w)	>= 0 — <= 0.4 % (w/w)	Refers to % element. Te is assumed to be present in the metallic form.

Classification:

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

Repr. 1A; H360: 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 Chronic 3; H412: Harmful to aquatic life with long lasting effects.

Labelling:

Signal word: Danger

Hazard pictograms:

GHS08: health hazard

Hazard statements:

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.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains Nickel