



Grade name:	Wastes, lead battery reprocessing (no skin irritation grade)
Substance:	Wastes, lead battery reprocessing
EC Number:	305-445-7
CAS Number:	94551-99-2
Substance Type:	UVCB
Degree of purity:	100 % (w/w)
Description of Product:	Wastes, lead battery reprocessing is made by recovering the lead compounds from exhausted lead-acid batteries and converting it into a prepared solid feed suitable for lead smelting. Lead is mainly present as oxides, sulphates and in metallic form.

Composition:

Constituents	Typical concentration	Concentration range	Remarks
Lead EC no.: 231-100-4	<= 79.5 % (w/w)	>= 0 — <= 80 % (w/w)	Refers to % element. In general Pb is mainly present in form of oxides (e.g. Pb ₂ O ₆ , PbO, PbCaO ₆). Pb may also be present in the sulphate form (e.g. PbSO ₄) and/or metallic form.
Copper EC no.: 231-159-6	<= 0.03 % (w/w)	>= 0 — <= 0.1 % (w/w)	Refers to % element. Cu is assumed to be present in the sulphate form.
Sulfur EC no.: 231-722-6	<= 8 % (w/w)	>= 0 — <= 10 % (w/w)	Refers to % element. S is generally present in the sulphate form (e.g. PbSO ₄).
Zinc EC no.: 231-175-3	<= 0.2 % (w/w)	>= 0 — <= 3 % (w/w)	Refers to % element. Zn is assumed to be present in the sulphate form.
Cadmium EC no.: 231-152-8	<= 0.05 % (w/w)	>= 0 — <= 0.1 % (w/w)	Refers to % element. Cd is assumed to be present in the sulphate form.
Iron EC no.: 231-096-4	<= 0.33 % (w/w)	>= 0 — <= 3 % (w/w)	Refers to % element. Fe is assumed to be present in the oxide form.
Nickel EC no.: 231-111-4	<= 0.055 % (w/w)	>= 0 — <= 0.1 % (w/w)	Refers to % element. Ni is assumed to be present in the sulphate form.
Antimony EC no.: 231-146-5	<= 2.5 % (w/w)	>= 0 — <= 5 % (w/w)	Refers to % element. Sb is assumed to be present in the oxide form.
Arsenic EC no.: 231-148-6	<= 0.1 % (w/w)	>= 0 — <= 0.2 % (w/w)	Refers to % element. As is assumed to be present in the oxide form.
Bismuth EC no.: 231-177-4	<= 0.05 % (w/w)	>= 0 — <= 0.08 % (w/w)	Refers to % element. Bi is assumed to be present in the

Constituents	Typical concentration	Concentration range	Remarks
			oxide form.
Tin EC no.: 231-141-8	<= 0.3 % (w/w)	>= 0 — <= 0.4 % (w/w)	Refers to % element. Sn is assumed to be present in the oxide form.
Aluminium EC no.: 231-072-3	<= 0.062 % (w/w)	>= 0 — <= 3 % (w/w)	Refers to % element. Al is assumed to be present in the oxide form.
Manganese EC no.: 231-105-1	<= 0.142 % (w/w)	>= 0 — <= 0.2 % (w/w)	Refers to % element. Mn is assumed to be present in the oxide form.
Silicon EC no.: 231-130-8	<= 0.75 % (w/w)	>= 0 — <= 3 % (w/w)	Refers to % element. Si is assumed to be present in the silicate form.
Carbon EC no.: 231-153-3	<= 0.3 % (w/w)	>= 0 — <= 1 % (w/w)	Refers to % element. C is assumed to be present in the form of hydrocarbons.
Magnesium EC no.: 231-104-6	<= 0.027 % (w/w)	>= 0 — <= 0.04 % (w/w)	Refers to % element. Mg is assumed to be present in the oxide form.
Calcium EC no.: 231-179-5	<= 0.67 % (w/w)	>= 0 — <= 8 % (w/w)	Refers to % element. Ca is generally present in the oxide form (e.g. PbCaO6).
Sodium EC no.: 231-132-9	<= 0.91 % (w/w)	>= 0 — <= 1 % (w/w)	Refers to % element. Na is assumed to be present in the oxide form.

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 wastes, lead battery reprocessing (No eye damage/irritation potential) to bring it into line with the latest scientific data and knowledge. The proposed classification will be:

DSD

Xn; R20/22 Harmful by inhalation and if swallowed.

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

Xi: R41: Risk of serious damage to eyes.

R43; May cause sensitisation by skin contact.

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. 4 H302:Harmful if swallowed.

Acute Tox. 4 H332: Harmful if inhaled.

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

Eye Irrit. 2; H319: Causes serious eye irritation.

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:

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.

H319 Causes serious eye irritation.

H360FD May damage fertility. May damage the unborn child.

H350 May cause cancer.

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

The statements and content supplied in this document are for information purposes only and do not constitute advice regarding legal or regulatory compliance. You are solely responsible for obtaining legal or regulatory advice necessary in making your own evaluation of any legal or regulatory requirements applicable to you or your company. The International Lead Association Europe and the Pb REACH Consortium do not make any representations or warranties in relation to the statements or content appearing in this document, including as regards their accuracy, completeness or timeliness. Neither the International Lead Association Europe nor the Pb REACH Consortium will be responsible for any loss or damage caused by or arising from reliance on the statements made or information contained in this document.