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|---|---|---|
| Substance Name | Substance Information Page | |
| **Slags, lead reverbatory smelting** | http://echa.europa.eu/brief-profile/-/briefprofile/100.098.593 | **Legend** |
| | | Decisive substance sameness criterion |
| | | Indicative substance sameness criterion |
| Substance description: | (EC description) By-product from the smelting of lead ores, scrap lead or lead smelter dross. Consists primarily of oxides and silicates of antimony and lead. | No substance sameness criterion |
| SIEF description: | Slags, lead reverbatory smelting are slags formed during primary or secondary lead smelting operations. The slags contain relatively high concentrations of lead, as well as impurity base metals, all of which are mainly present as oxides, silicates or sulphates. | |

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| **Substance Identity** | EC/list name: | Slags, lead reverbatory smelting | SMILES: | not applicable |
| | IUPAC name: | | InChI: | not applicable |
| | Other names | | Type of substance: | UVCB |
| | EC/List no.: | 273-800-2 | origin: | Inorganic |
| | CAS no.: | 69029-58-9 | | |
| | Molecular formula: | not applicable | Substance listed | |

| **SID parameters** | **Sameness criteria** | **Indication of variability** (fixed, low or high variation) |
|---|---|---|
| **Sources (input materials)** | Lead-bearing materials from primary and secondary sources, including intermediates. | medium |
| **Process** | Production: in smelter or reverbatory furnace under oxidising atmosphere. | fixed |
| | Separation: tapping | fixed |

| **Elemental composition** | **Core** | **min (% w/w)** | **max (% w/w)** | **Typical (%w/w)** | |
|---|---|---|---|---|---|
| | Lead | 15 | 70 | 29.3 | medium |
| | Silicon | 2 | 26 | 19.3 | low |
| | Iron | 2 | 25 | 11.8 | low |
| | Calcium | 0 | 25 | 7.4 | low |
| | Aluminium | 0 | 8 | 4.6 | low |
| | Sulphur | 0 | 5 | 0.63 | low |
| | Copper | 0 | 14 | 7.0 | low |
| | Antimony | 0 | 5 | 1.5 | low |
| | Zinc | 0 | 14 | 6.8 | low |
| | Cadmium | 0 | 0.3 | 0.14 | low |
| | Cobalt | 0 | 1 | 0.08 | low |
| | Nickel | 0 | 10 | 0.07 | low |
| | Silver | 0 | 1 | 0.4 | low |
| | Gold | 0 | 1 | 0.5 | low |
| | Arsenic | 0 | 10 | 1.1 | low |
| | Bismuth | 0 | 10 | 0.12 | low |
| | Tin | 0 | 10 | 1.77 | low |
| | Selenium | 0 | 0.2 | 0.09 | low |
| | Tellurium | 0 | 0.2 | 0.06 | low |
| | Chromium | 0 | 1 | 0.4 | low |
| | Molybdenum | 0 | 1 | 0.2 | low |
| | Manganese | 0 | 2 | 1.03 | low |
| | Sodium | 0 | 5 | 1.00 | low |
| | Potassium | 0 | 5 | 0.05 | low |
| | Magnesium | 0 | 10 | 0.9 | low |
| | Other constituents | | | | low |
| | **Sum=** | | | **72.4** | |
| **Mineralogical composition** | Lead silicates | | | 64 | medium |
| | Iron oxides | | | 23 | low |
| | Lead sulfides | | | 3 | low |
| | Lead oxides | | | 1 | low |
| | **Sum=** | | | **87** | |
| **Physical characteristics** | **physical state (at 20°C, 1013 hPa)** | Solid; granules (coarse chunks) | | | Fixed |
| | **colour** | Dark; black-brown to red/purple-brown to grey-green | | | Medium |

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| **Conclusion** | **Slags, lead reverbatory smelting is a solid in granular form. It is from oxidising smelting processes applied on primary and secondary lead-containing feeds. Slags, lead reverbatory smelting is composed primarily of lead silicates and iron oxides.** |