

Substance: Slags, ferromolybdenum-manufg., silicothermic (ferromolybdenum slags)**EC Number** 282-217-2**Type of substance:** UVCB

Name of boundary composition:		"Boundary composition: Slags, ferromolybdenum-manufg., silicothermic"					
State / form:		solid: bulk					
Description of the composition:		<p>The substance "Slags, ferromolybdenum-manufg., silicothermic" ("ferromolybdenum slags") is a UVCB with the main constituent being silica (SiO₂), which can be present in amorphous and crystalline forms. The slag is a heterogeneous, often glassy material. The composition is variable, and it is technically very challenging to determine the exact chemical form in which individual elements are present. As required for a UVCB under REACH, the boundary composition - in addition to the list of constituents - includes a description of the manufacturing process, and a statement on the influence of raw materials and process conditions on the composition. This information is contained in a pdf document that is attached to the boundary composition in the lead registrants technical dossier.</p> <p>Further (confidential) information on the influence of process conditions and raw materials on the composition may be provided by individual registrants within their respective legal entity composition.</p> <p>ATTACHMENT: Non-confidential-FeMo-slags-production_process-raw_materials-process_conditions-20210429.pdf</p>					
Degree of purity		100	% (w/w)				
		typical	min	max			
		% (w/w)	% (w/w)	% (w/w)			
		ca.					
Constituents				EC number	CAS number	Impurity relevant for C&L	Remarks
silica, SiO ₂ (amorphous and crystalline)	70	30	97	-	-	-	This constituent is used to describe in this boundary composition the content of amorphous and crystalline silica in FeMo slags. Where possible, individual registrants provide further analytical details.
calcium compounds / calcium equivalent	5	0	15	-	-	-	This constituent is used to describe various calcium compounds contained in this UVCB. Calcium is contained in FeMo Slags in the form of various "substances", such as oxides, silicates or others. Because of the nature of the slags, the exact chemical identity of calcium compounds is variable and can hardly be verified analytically. Therefore, this "group entry" for Ca-compounds has been set up. The typical concentration and concentration range are expressed as concentrations of the element calcium.
iron compounds / iron equivalent	5	1	30	-	-	-	This constituent is used to describe various iron compounds contained in this UVCB. Iron is contained in FeMo Slags in the form of various "substances", such as oxides, silicates or others. Because of the nature of the slags, the exact chemical identity of iron compounds is variable and can hardly be verified analytically. Therefore, this "group entry" for Fe-compounds has been set up. The typical concentration and concentration range are expressed as concentrations of the element iron.
aluminium compounds / aluminium equivalent	5	1	25	-	-	-	This constituent is used to describe various aluminium compounds contained in this UVCB. Aluminium is contained in FeMo Slags in the form of various "substances", such as oxides, silicates or others. Because of the nature of the slags, the exact chemical identity of Aluminium compounds is variable and can hardly be verified analytically. Therefore, this "group entry" for Al-compounds has been set up. The typical concentration and concentration range are expressed as concentrations of the element aluminium.

magnesium compounds / magnesium equivalent	2	0	10	-	-	-	This constituent is used to describe various magnesium compounds contained in this UVCB. Magnesium is contained in FeMo Slags in the form of various "substances", such as oxides, silicates or others. Because of the nature of the slags, the exact chemical identity of magnesium compounds is variable and can hardly be verified analytically. Therefore, this "group entry" for Mg-compounds has been set up. The typical concentration and concentration range are expressed as concentrations of the element magnesium.
molybdenum compounds / molybdenum equivalent	0.4	0	2	-	-	-	This constituent is used to describe various molybdenum compounds contained in this UVCB. Molybdenum is contained in FeMo Slags in the form of various "substances", such as oxides, silicates or others. Because of the nature of the slags, the exact chemical identity of molybdenum compounds is variable and can hardly be verified analytically. Therefore, this "group entry" for Mo-compounds has been set up. The typical concentration and concentration range are expressed as concentrations of the element molybdenum.
oxygen compounds / oxygen equivalent	12.6	0	30	-	-	-	This constituent has been included for formal reasons: As described above, calcium, iron, aluminium, magnesium and molybdenum can be present in FeMo slags in various chemical forms, for example as oxides, but mostly in mixed, amorphous materials. Because of the nature of the slag, the exact chemical identity of these compounds is variable and can hardly be verified analytically. Therefore, this "group entry" for oxygen-compounds has been set up, bringing the typical concentrations of all constituents to 100%.

Impurities

Not applicable. All substances in a UVCB substance are constituents, not impurities

Additives

Not applicable. All substances in a UVCB substance are constituents, not impurities