

2.1. Manufacture

Table 1. Manufacture

Identifiers	Use descriptors	Other information
M-1: Manufacture	<p>Environmental release category (ERC):</p> <p>ERC 1: Manufacture of substances</p> <p>Process category (PROC):</p> <p>PROC 1: Use in closed process, no likelihood of exposure</p> <p>PROC 2: Use in closed, continuous process with occasional controlled exposure</p> <p>PROC 3: Use in closed batch process (synthesis or formulation)</p> <p>PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises</p> <p>PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p> <p>PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities</p> <p>PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)</p>	
M-2: Formulation and synthesis -Use of the substance as intermediate (for chemical reactions) or for formulation (e.g. mixing, blending) of preparations/materials; -Use of the substance as laboratory chemical	<p>Environmental release category (ERC):</p> <p>ERC 1: Manufacture of substances</p> <p>ERC 2: Formulation of preparations</p> <p>ERC 3: Formulation in materials</p> <p>ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles</p> <p>ERC 5: Industrial use resulting in inclusion into or onto a matrix</p> <p>ERC 6a: Industrial use resulting in manufacture of another substance (use of intermediates)</p> <p>ERC 6b: Industrial use of reactive processing aids</p> <p>ERC 6d: Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers</p> <p>ERC 8a: Wide dispersive indoor use of processing aids in open systems</p> <p>ERC 8b: Wide dispersive indoor use of reactive substances in open systems</p> <p>Process category (PROC):</p> <p>PROC 1: Use in closed process, no likelihood of exposure</p> <p>PROC 2: Use in closed, continuous process with occasional controlled exposure</p> <p>PROC 3: Use in closed batch process (synthesis or formulation)</p> <p>PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises</p> <p>PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)</p>	Only ERC 2 and 3 can be selected for formulation uses

Identifiers	Use descriptors	Other information
	PROC 6: Calendering operations PROC 7: Industrial spraying PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation PROC 15: Use as laboratory reagent PROC 19: Hand-mixing with intimate contact and only PPE available.	

2.2. Identified uses

Table 2. Formulation

Identifiers	Use descriptors	Other information
F-2: Formulation and synthesis -Use of the substance as intermediate (for chemical reactions) or for formulation (e.g. mixing, blending) of preparations/materials; -Use of the substance as laboratory chemical	<p>Environmental release category (ERC):</p> ERC 1: Manufacture of substances ERC 2: Formulation of preparations ERC 3: Formulation in materials ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles ERC 5: Industrial use resulting in inclusion into or onto a matrix ERC 6a: Industrial use resulting in manufacture of another substance (use of intermediates) ERC 6b: Industrial use of reactive processing aids ERC 6d: Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers ERC 8a: Wide dispersive indoor use of processing aids in open systems ERC 8b: Wide dispersive indoor use of reactive substances in open systems	Substance supplied to that use: As such In a mixture Only ERC 2 and 3 can be selected for formulation uses PC 19 has been removed in the latest version of the Use Descriptor guidance and therefore will not be available for selection in IUCLID 6
	<p>Process category (PROC):</p> PROC 1: Use in closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 6: Calendering operations PROC 7: Industrial spraying PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large	

Identifiers	Use descriptors	Other information
	<p>containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation PROC 15: Use as laboratory reagent PROC 19: Hand-mixing with intimate contact and only PPE available.</p> <p>Product Category formulated: PC 21: Laboratory chemicals PC 20: Products such as ph-regulators, flocculants, precipitants, neutralisation agents PC 19: Intermediate</p> <p>Technical function of the substance during formulation: Colouring agents, pigments Colouring agents, dyes Food/feedstuff additives Pharmaceutical substance Biocide substances pH-regulating agents</p>	
<p>F-3: Industrial end use as additive/pigment/auxiliary in plastics/resins/paints, additive in lubricants, metal working fluids and greases, raw material for glass,coating systems on ceramic materials (glazes, coatings, oxidation protection etc.).</p>	<p>Environmental release category (ERC): ERC 3: Formulation in materials ERC 5: Industrial use resulting in inclusion into or onto a matrix ERC 8a: Wide dispersive indoor use of processing aids in open systems ERC 8b: Wide dispersive indoor use of reactive substances in open systems ERC 8c: Wide dispersive indoor use resulting in inclusion into or onto a matrix ERC 8d: Wide dispersive outdoor use of processing aids in open systems ERC 8e: Wide dispersive outdoor use of reactive substances in open systems ERC 8f: Wide dispersive outdoor use resulting in inclusion into or onto a matrix ERC 9a: Wide dispersive indoor use of substances in closed systems ERC 9b: Wide dispersive outdoor use of substances in closed systems ERC 10a: Wide dispersive outdoor use of long-life articles and materials with low release ERC 10b: Wide dispersive outdoor use of long-life articles and materials with high or intended release (including abrasive processing) ERC 11a: Wide dispersive indoor use of long-life articles and materials with low release ERC 11b: Wide dispersive indoor use of long-life articles and materials with high or intended release (including abrasive processing)</p>	<p>Substance supplied to that use: As such In a mixture</p> <p>Only ERC 2 and 3 can be selected for formulation uses</p>

Identifiers	Use descriptors	Other information
	<p>ERC 2: Formulation of preparations ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles ERC 6a: Industrial use resulting in manufacture of another substance (use of intermediates) ERC 6b: Industrial use of reactive processing aids</p> <p>Process category (PROC):</p> <p>PROC 1: Use in closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 6: Calendering operations PROC 7: Industrial spraying PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 13: Treatment of articles by dipping and pouring PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation PROC 17: Lubrication at high energy conditions and in partly open process PROC 19: Hand-mixing with intimate contact and only PPE available. PROC 21: Low energy manipulation of substances bound in materials and/or articles PROC 22: Potentially closed processing operations with minerals/metals at elevated temperature. Industrial setting PROC 23: Open processing and transfer operations with minerals/metals at elevated temperature PROC 24: High (mechanical) energy work-up of substances bound in materials and/or articles PROC 26: Handling of solid inorganic substances at ambient temperature</p> <p>Product Category formulated:</p> <p>PC 2: Adsorbents PC 9a: Coatings and paints, thinners, paint removes PC 9b: Fillers, putties, plasters, modelling clay PC 20: Products such as ph-regulators, flocculants, precipitants, neutralisation agents PC 24: Lubricants, greases, release products</p>	

Identifiers	Use descriptors	Other information
	<p>PC 25: Metal working fluids PC 32: Polymer preparations and compounds PC 0: Other: other products, use UCN codes, H 15500, R 30200</p> <p>Technical function of the substance during formulation:</p> <p>Colouring agents, pigments Colouring agents, dyes Food/feedstuff additives Pharmaceutical substance Biocide substances pH-regulating agents</p>	
<p>F-4: Industrial use for manufacture of metal products, electronic and electrical equipment</p>	<p>Environmental release category (ERC):</p> <p>ERC 3: Formulation in materials ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles ERC 5: Industrial use resulting in inclusion into or onto a matrix ERC 6b: Industrial use of reactive processing aids ERC 7: Industrial use of substances in closed systems ERC 10a: Wide dispersive outdoor use of long-life articles and materials with low release ERC 11a: Wide dispersive indoor use of long-life articles and materials with low release ERC 2: Formulation of preparations ERC 6a: Industrial use resulting in manufacture of another substance (use of intermediates)</p> <p>Process category (PROC):</p> <p>PROC 1: Use in closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 6: Calendering operations PROC 7: Industrial spraying PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation PROC 19: Hand-mixing with intimate contact and</p>	<p>Substance supplied to that use: As such In a mixture Only ERC 2 and 3 can be selected for formulation uses</p>

Identifiers	Use descriptors	Other information
	<p>only PPE available. PROC 22: Potentially closed processing operations with minerals/metals at elevated temperature. Industrial setting PROC 23: Open processing and transfer operations with minerals/metals at elevated temperature PROC 26: Handling of solid inorganic substances at ambient temperature</p> <p>Product Category formulated:</p> <p>PC 7: Base metals and alloys PC 20: Products such as ph-regulators, flocculants, precipitants, neutralisation agents</p> <p>Technical function of the substance during formulation:</p> <p>Colouring agents, pigments Colouring agents, dyes Food/feedstuff additives Pharmaceutical substance Biocide substances pH-regulating agents</p>	
<p>F-5: Industrial use as/for - food additive, cosmetics, pharmaceuticals, biocidal products</p>	<p>Environmental release category (ERC):</p> <p>ERC 2: Formulation of preparations ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles ERC 8a: Wide dispersive indoor use of processing aids in open systems ERC 8b: Wide dispersive indoor use of reactive substances in open systems ERC 5: Industrial use resulting in inclusion into or onto a matrix ERC 7: Industrial use of substances in closed systems</p> <p>Process category (PROC):</p> <p>PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 6: Calendering operations PROC 7: Industrial spraying PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)</p>	<p>Substance supplied to that use: As such In a mixture</p> <p>Only ERC 2 and 3 can be selected for formulation uses</p>

Identifiers	Use descriptors	Other information
	<p>PROC 10: Roller application or brushing PROC 13: Treatment of articles by dipping and pouring PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation PROC 16: Using material as fuel sources, limited exposure to unburned product to be expected PROC 19: Hand-mixing with intimate contact and only PPE available. PROC 22: Potentially closed processing operations with minerals/metals at elevated temperature. Industrial setting PROC 26: Handling of solid inorganic substances at ambient temperature</p> <p>Product Category formulated:</p> <p>PC 29: Pharmaceuticals PC 39: Cosmetics, personal care products PC 8: Biocidal products (e.g. disinfectants, pest control) PC 20: Products such as ph-regulators, flocculants, precipitants, neutralisation agents PC 15: Non-metal-surface treatment products</p> <p>Technical function of the substance during formulation:</p> <p>Colouring agents, pigments Colouring agents, dyes Food/feedstuff additives Pharmaceutical substance Biocide substances pH-regulating agents</p>	

Table 3. Uses at industrial sites

Identifiers	Use descriptors	Other information
IW-2: Formulation and synthesis -Use of the substance as intermediate (for chemical reactions) or for formulation (e.g. mixing, blending) of preparations/materials; -Use of the substance as laboratory chemical	<p>Environmental release category (ERC):</p> <p>ERC 1: Manufacture of substances ERC 2: Formulation of preparations ERC 3: Formulation in materials ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles ERC 5: Industrial use resulting in inclusion into or onto a matrix ERC 6a: Industrial use resulting in manufacture of another substance (use of intermediates) ERC 6b: Industrial use of reactive processing aids ERC 6d: Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers ERC 8a: Wide dispersive indoor use of processing aids in open systems ERC 8b: Wide dispersive indoor use of reactive substances in open systems</p> <p>Process category (PROC):</p> <p>PROC 1: Use in closed process, no likelihood of</p>	<p>Substance supplied to that use:</p> <p>As such In a mixture</p> <p>Subsequent service life relevant for that use: no</p> <p>Only ERC 4, 5, 6a, 6b, 6c, 6d and 7 can be selected for industrial uses</p> <p>PC 19 has been removed in the latest version of the Use Descriptor guidance and therefore will not be available for selection in IUCLID 6</p> <p>SU 10 has been removed in</p>

Identifiers	Use descriptors	Other information
	<p>exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 6: Calendering operations PROC 7: Industrial spraying PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation PROC 15: Use as laboratory reagent PROC 19: Hand-mixing with intimate contact and only PPE available.</p> <p>Product Category used: PC 21: Laboratory chemicals PC 20: Products such as ph-regulators, flocculants, precipitants, neutralisation agents PC 19: Intermediate</p> <p>Sector of end use: SU 8: Manufacture of bulk, large scale chemicals (including petroleum products) SU 9: Manufacture of fine chemicals SU 10: Formulation [mixing] of preparations and/or re-packaging (excluding alloys) SU 24: Scientific research and development SU 0: Other: SU 3: Industrial uses</p> <p>Technical function of the substance during formulation: Colouring agents, pigments Colouring agents, dyes Food/feedstuff additives Pharmaceutical substance Biocide substances pH-regulating agents</p>	<p>the latest version of the Use Descriptor guidance and therefore will not be available for selection in IUCLID 6</p> <p>SU 3 has been removed in the latest version of the Use Descriptor guidance and therefore will not be available for selection in IUCLID 6</p>
<p>IW-3: Industrial end use as additive/pigment/auxiliary in plastics/resins/paints, additive in lubricants, metal</p>	<p>Environmental release category (ERC): ERC 3: Formulation in materials ERC 5: Industrial use resulting in inclusion into or onto a matrix ERC 8a: Wide dispersive indoor use of processing aids in open systems ERC 8b: Wide dispersive indoor use of reactive</p>	<p>Substance supplied to that use: As such In a mixture</p> <p>Subsequent service life relevant for that use: yes</p>

Identifiers	Use descriptors	Other information
<p>working fluids and greases, raw material for glass, coating systems on ceramic materials (glazes, coatings, oxidation protection etc.).</p>	<p>substances in open systems ERC 8c: Wide dispersive indoor use resulting in inclusion into or onto a matrix ERC 8d: Wide dispersive outdoor use of processing aids in open systems ERC 8e: Wide dispersive outdoor use of reactive substances in open systems ERC 8f: Wide dispersive outdoor use resulting in inclusion into or onto a matrix ERC 9a: Wide dispersive indoor use of substances in closed systems ERC 9b: Wide dispersive outdoor use of substances in closed systems ERC 10a: Wide dispersive outdoor use of long-life articles and materials with low release ERC 10b: Wide dispersive outdoor use of long-life articles and materials with high or intended release (including abrasive processing) ERC 11a: Wide dispersive indoor use of long-life articles and materials with low release ERC 11b: Wide dispersive indoor use of long-life articles and materials with high or intended release (including abrasive processing) ERC 2: Formulation of preparations ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles ERC 6a: Industrial use resulting in manufacture of another substance (use of intermediates) ERC 6b: Industrial use of reactive processing aids</p> <p>Process category (PROC):</p> <p>PROC 1: Use in closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 6: Calendering operations PROC 7: Industrial spraying PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 13: Treatment of articles by dipping and pouring PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation</p>	<p>Only ERC 4, 5, 6a, 6b, 6c, 6d and 7 can be selected for industrial uses</p> <p>SU 3 has been removed in the latest version of the Use Descriptor guidance and therefore will not be available for selection in IUCLID 6</p>

Identifiers	Use descriptors	Other information
	<p>PROC 17: Lubrication at high energy conditions and in partly open process PROC 19: Hand-mixing with intimate contact and only PPE available. PROC 21: Low energy manipulation of substances bound in materials and/or articles PROC 22: Potentially closed processing operations with minerals/metals at elevated temperature. Industrial setting PROC 23: Open processing and transfer operations with minerals/metals at elevated temperature PROC 24: High (mechanical) energy work-up of substances bound in materials and/or articles PROC 26: Handling of solid inorganic substances at ambient temperature</p> <p>Product Category used:</p> <p>PC 2: Adsorbents PC 9a: Coatings and paints, thinners, paint removes PC 9b: Fillers, putties, plasters, modelling clay PC 20: Products such as ph-regulators, flocculants, precipitants, neutralisation agents PC 24: Lubricants, greases, release products PC 25: Metal working fluids PC 32: Polymer preparations and compounds PC 0: Other: other products, use UCN codes, H 15500, R 30200</p> <p>Sector of end use:</p> <p>SU 12: Manufacture of plastics products, including compounding and conversion SU 8: Manufacture of bulk, large scale chemicals (including petroleum products) SU 9: Manufacture of fine chemicals SU 13: Manufacture of other non-metallic mineral products, e.g. plasters, cement SU 19: Building and construction work SU 0: Other: SU 3: Industrial uses</p> <p>Technical function of the substance during formulation:</p> <p>Colouring agents, pigments Colouring agents, dyes Food/feedstuff additives Pharmaceutical substance Biocide substances pH-regulating agents</p>	
<p>IW-4: Industrial use for manufacture of metal products, electronic and electrical equipment</p>	<p>Environmental release category (ERC):</p> <p>ERC 3: Formulation in materials ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles ERC 5: Industrial use resulting in inclusion into or onto a matrix ERC 6b: Industrial use of reactive processing aids ERC 7: Industrial use of substances in closed systems</p>	<p>Substance supplied to that use: As such In a mixture</p> <p>Subsequent service life relevant for that use: yes</p> <p>Only ERC 4, 5, 6a, 6b, 6c, 6d and 7 can be selected for</p>

Identifiers	Use descriptors	Other information
	<p>ERC 10a: Wide dispersive outdoor use of long-life articles and materials with low release</p> <p>ERC 11a: Wide dispersive indoor use of long-life articles and materials with low release</p> <p>ERC 2: Formulation of preparations</p> <p>ERC 6a: Industrial use resulting in manufacture of another substance (use of intermediates)</p> <p>Process category (PROC):</p> <p>PROC 1: Use in closed process, no likelihood of exposure</p> <p>PROC 2: Use in closed, continuous process with occasional controlled exposure</p> <p>PROC 3: Use in closed batch process (synthesis or formulation)</p> <p>PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises</p> <p>PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)</p> <p>PROC 6: Calendering operations</p> <p>PROC 7: Industrial spraying</p> <p>PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p> <p>PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities</p> <p>PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)</p> <p>PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation</p> <p>PROC 19: Hand-mixing with intimate contact and only PPE available.</p> <p>PROC 22: Potentially closed processing operations with minerals/metals at elevated temperature. Industrial setting</p> <p>PROC 23: Open processing and transfer operations with minerals/metals at elevated temperature</p> <p>PROC 26: Handling of solid inorganic substances at ambient temperature</p> <p>Product Category used:</p> <p>PC 7: Base metals and alloys</p> <p>PC 20: Products such as ph-regulators, flocculants, precipitants, neutralisation agents</p> <p>Sector of end use:</p> <p>SU 0: Other: SU 3: Industrial uses</p> <p>Technical function of the substance during formulation:</p> <p>Colouring agents, pigments</p> <p>Colouring agents, dyes</p> <p>Food/feedstuff additives</p> <p>Pharmaceutical substance</p> <p>Biocide substances</p>	<p>industrial uses</p> <p>SU 3 has been removed in the latest version of the Use Descriptor guidance and therefore will not be available for selection in IUCLID 6</p>

Identifiers	Use descriptors	Other information
	pH-regulating agents	
IW-5: Industrial use as/for - food additive, cosmetics, pharmaceuticals, biocidal products	<p>Environmental release category (ERC):</p> <p>ERC 2: Formulation of preparations ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles ERC 8a: Wide dispersive indoor use of processing aids in open systems ERC 8b: Wide dispersive indoor use of reactive substances in open systems ERC 5: Industrial use resulting in inclusion into or onto a matrix ERC 7: Industrial use of substances in closed systems</p> <p>Process category (PROC):</p> <p>PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 6: Calendering operations PROC 7: Industrial spraying PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 10: Roller application or brushing PROC 13: Treatment of articles by dipping and pouring PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation PROC 16: Using material as fuel sources, limited exposure to unburned product to be expected PROC 19: Hand-mixing with intimate contact and only PPE available. PROC 22: Potentially closed processing operations with minerals/metals at elevated temperature. Industrial setting PROC 26: Handling of solid inorganic substances at ambient temperature</p> <p>Product Category used:</p> <p>PC 29: Pharmaceuticals PC 39: Cosmetics, personal care products PC 8: Biocidal products (e.g. disinfectants, pest control) PC 20: Products such as ph-regulators, flocculants,</p>	<p>Substance supplied to that use:</p> <p>As such In a mixture</p> <p>Subsequent service life relevant for that use: no</p> <p>Only ERC 4, 5, 6a, 6b, 6c, 6d and 7 can be selected for industrial uses</p> <p>SU 3 has been removed in the latest version of the Use Descriptor guidance and therefore will not be available for selection in IUCLID 6</p>

Identifiers	Use descriptors	Other information
	<p>precipitants, neutralisation agents PC 15: Non-metal-surface treatment products</p> <p>Sector of end use:</p> <p>SU 4: Manufacture of food products SU 20: Health services SU 0: Other: SU 3: Industrial uses</p> <p>Technical function of the substance during formulation:</p> <p>Colouring agents, pigments Colouring agents, dyes Food/feedstuff additives Pharmaceutical substance Biocide substances pH-regulating agents</p>	

Table 4. Uses by professional workers

Identifiers	Use descriptors	Other information
PW-6: Formulation and synthesis -Use of the substance as intermediate (for chemical reactions) or for formulation (e.g. mixing, blending) of preparations/materials; -Use of the substance as laboratory chemical	<p>Environmental release category (ERC):</p> <p>ERC 2: Formulation of preparations ERC 3: Formulation in materials ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles ERC 5: Industrial use resulting in inclusion into or onto a matrix ERC 6a: Industrial use resulting in manufacture of another substance (use of intermediates) ERC 6b: Industrial use of reactive processing aids ERC 6d: Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers ERC 8a: Wide dispersive indoor use of processing aids in open systems ERC 8b: Wide dispersive indoor use of reactive substances in open systems</p> <p>Process category (PROC):</p> <p>PROC 1: Use in closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 6: Calendering operations PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities</p>	<p>Substance supplied to that use:</p> <p>As such In a mixture</p> <p>Subsequent service life relevant for that use: no</p> <p>Only ERC 8a, 8b, 8c, 8d, 8e, 8f, 9a and 9b can be selected for professional uses</p> <p>PC 19 has been removed in the latest version of the Use Descriptor guidance and therefore will not be available for selection in IUCLID 6</p> <p>SU 10 has been removed in the latest version of the Use Descriptor guidance and therefore will not be available for selection in IUCLID 6</p> <p>SU 22 has been removed in the latest version of the Use Descriptor guidance and therefore will not be available for selection in IUCLID 6</p>

Identifiers	Use descriptors	Other information
	<p>PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)</p> <p>PROC 13: Treatment of articles by dipping and pouring</p> <p>PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation</p> <p>PROC 15: Use as laboratory reagent</p> <p>PROC 19: Hand-mixing with intimate contact and only PPE available.</p> <p>PROC 11: Non industrial spraying</p> <p>Product Category used:</p> <p>PC 19: Intermediate</p> <p>PC 20: Products such as ph-regulators, flocculants, precipitants, neutralisation agents</p> <p>PC 21: Laboratory chemicals</p> <p>Sector of end use:</p> <p>SU 10: Formulation [mixing] of preparations and/or re-packaging (excluding alloys)</p> <p>SU 9: Manufacture of fine chemicals</p> <p>SU 8: Manufacture of bulk, large scale chemicals (including petroleum products)</p> <p>SU 24: Scientific research and development</p> <p>SU 0: Other: SU 22: Professional uses</p> <p>Technical function of the substance during formulation:</p> <p>Colouring agents, pigments</p> <p>Colouring agents, dyes</p> <p>Food/feedstuff additives</p> <p>Pharmaceutical substance</p> <p>Biocide substances</p> <p>pH-regulating agents</p>	
<p>PW-7: Professional end use as additive/pigment/auxiliary in plastics/resins/paints, additive in lubricants, metal working fluids and greases, raw material for glass, coating systems on ceramic materials (glazes, coatings, oxidation protection etc.).</p>	<p>Environmental release category (ERC):</p> <p>ERC 3: Formulation in materials</p> <p>ERC 8a: Wide dispersive indoor use of processing aids in open systems</p> <p>ERC 8b: Wide dispersive indoor use of reactive substances in open systems</p> <p>ERC 8c: Wide dispersive indoor use resulting in inclusion into or onto a matrix</p> <p>ERC 8d: Wide dispersive outdoor use of processing aids in open systems</p> <p>ERC 8e: Wide dispersive outdoor use of reactive substances in open systems</p> <p>ERC 8f: Wide dispersive outdoor use resulting in inclusion into or onto a matrix</p> <p>ERC 9a: Wide dispersive indoor use of substances in closed systems</p> <p>ERC 9b: Wide dispersive outdoor use of substances in closed systems</p> <p>ERC 10a: Wide dispersive outdoor use of long-life articles and materials with low release</p> <p>ERC 10b: Wide dispersive outdoor use of long-life articles and materials with high or intended release</p>	<p>Substance supplied to that use:</p> <p>As such</p> <p>In a mixture</p> <p>Subsequent service life relevant for that use: yes</p> <p>Only ERC 8a, 8b, 8c, 8d, 8e, 8f, 9a and 9b can be selected for professional uses</p> <p>SU 22 has been removed in the latest version of the Use Descriptor guidance and therefore will not be available for selection in IUCLID 6</p>

Identifiers	Use descriptors	Other information
	<p>(including abrasive processing) ERC 11a: Wide dispersive indoor use of long-life articles and materials with low release ERC 11b: Wide dispersive indoor use of long-life articles and materials with high or intended release (including abrasive processing) ERC 2: Formulation of preparations ERC 1: Manufacture of substances ERC 5: Industrial use resulting in inclusion into or onto a matrix ERC 6a: Industrial use resulting in manufacture of another substance (use of intermediates) ERC 6b: Industrial use of reactive processing aids ERC 6c: Industrial use of monomers for manufacture of thermoplastics ERC 6d: Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers</p> <p>Process category (PROC):</p> <p>PROC 1: Use in closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 6: Calendering operations PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 11: Non industrial spraying PROC 13: Treatment of articles by dipping and pouring PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation PROC 17: Lubrication at high energy conditions and in partly open process PROC 19: Hand-mixing with intimate contact and only PPE available. PROC 21: Low energy manipulation of substances bound in materials and/or articles PROC 22: Potentially closed processing operations with minerals/metals at elevated temperature. Industrial setting PROC 23: Open processing and transfer operations with minerals/metals at elevated temperature PROC 24: High (mechanical) energy work-up of</p>	

Identifiers	Use descriptors	Other information
	<p>substances bound in materials and/or articles PROC 26: Handling of solid inorganic substances at ambient temperature</p> <p>Product Category used:</p> <p>PC 2: Adsorbents PC 9a: Coatings and paints, thinners, paint removes PC 9b: Fillers, putties, plasters, modelling clay PC 20: Products such as ph-regulators, flocculants, precipitants, neutralisation agents PC 24: Lubricants, greases, release products PC 25: Metal working fluids PC 32: Polymer preparations and compounds PC 0: Other: UCN codes: H 15500, R 30200</p> <p>Sector of end use:</p> <p>SU 12: Manufacture of plastics products, including compounding and conversion SU 8: Manufacture of bulk, large scale chemicals (including petroleum products) SU 9: Manufacture of fine chemicals SU 13: Manufacture of other non-metallic mineral products, e.g. plasters, cement SU 19: Building and construction work SU 0: Other: SU 22: Professional uses</p> <p>Technical function of the substance during formulation:</p> <p>Colouring agents, pigments Colouring agents, dyes Food/feedstuff additives Pharmaceutical substance Biocide substances pH-regulating agents</p>	
<p>PW-8: Professional end use as/for - food additive, cosmetics, pharmaceuticals, biocidal products</p>	<p>Environmental release category (ERC):</p> <p>ERC 2: Formulation of preparations ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles ERC 8a: Wide dispersive indoor use of processing aids in open systems ERC 8b: Wide dispersive indoor use of reactive substances in open systems ERC 6a: Industrial use resulting in manufacture of another substance (use of intermediates) ERC 6b: Industrial use of reactive processing aids</p> <p>Process category (PROC):</p> <p>PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation</p>	<p>Substance supplied to that use:</p> <p>As such In a mixture</p> <p>Subsequent service life relevant for that use: no</p> <p>Only ERC 8a, 8b, 8c, 8d, 8e, 8f, 9a and 9b can be selected for professional uses</p> <p>SU 22 has been removed in the latest version of the Use Descriptor guidance and therefore will not be available for selection in IUCLID 6</p>

Identifiers	Use descriptors	Other information
	<p>(charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 10: Roller application or brushing PROC 11: Non industrial spraying PROC 13: Treatment of articles by dipping and pouring PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation PROC 16: Using material as fuel sources, limited exposure to unburned product to be expected PROC 19: Hand-mixing with intimate contact and only PPE available. PROC 22: Potentially closed processing operations with minerals/metals at elevated temperature. Industrial setting PROC 26: Handling of solid inorganic substances at ambient temperature</p> <p>Product Category used:</p> <p>PC 29: Pharmaceuticals PC 39: Cosmetics, personal care products PC 8: Biocidal products (e.g. disinfectants, pest control) PC 20: Products such as ph-regulators, flocculants, precipitants, neutralisation agents PC 15: Non-metal-surface treatment products</p> <p>Sector of end use:</p> <p>SU 4: Manufacture of food products SU 20: Health services SU 0: Other: SU 22: Professional uses</p> <p>Technical function of the substance during formulation:</p> <p>Colouring agents, pigments Colouring agents, dyes Food/feedstuff additives Pharmaceutical substance Biocide substances pH-regulating agents</p>	

Table 5. Consumer uses

Identifiers	Use descriptors	Other information
<p>C-9: Consumer end use as - additive/pigment/auxiliary in plastics/resins/paints</p>	<p>Environmental release category (ERC):</p> <p>ERC 10a: Wide dispersive outdoor use of long-life articles and materials with low release ERC 11a: Wide dispersive indoor use of long-life articles and materials with low release</p> <p>Product Category used:</p> <p>PC 9a: Coatings and paints, thinners, paint removes PC 9b: Fillers, putties, plasters, modelling clay</p> <p>Technical function of the substance during</p>	<p>Subsequent service life relevant for that use: yes</p> <p>Only ERC 8a, 8b, 8c, 8d, 8e, 8f, 9a and 9b can be selected for consumer uses</p>

Identifiers	Use descriptors	Other information
	<p>formulation:</p> <ul style="list-style-type: none"> Colouring agents, pigments Colouring agents, dyes Food/feedstuff additives Pharmaceutical substance Biocide substances pH-regulating agents 	
C-10: Consumer end use for application of coatings and inks	<p>Environmental release category (ERC):</p> <ul style="list-style-type: none"> ERC 8c: Wide dispersive indoor use resulting in inclusion into or onto a matrix ERC 8f: Wide dispersive outdoor use resulting in inclusion into or onto a matrix <p>Product Category used:</p> <ul style="list-style-type: none"> PC 18: Ink and toners <p>Technical function of the substance during formulation:</p> <ul style="list-style-type: none"> Colouring agents, pigments Colouring agents, dyes Food/feedstuff additives Pharmaceutical substance Biocide substances pH-regulating agents 	Subsequent service life relevant for that use: no
C-11: Consumer end use as - cosmetics	<p>Environmental release category (ERC):</p> <ul style="list-style-type: none"> ERC 8a: Wide dispersive indoor use of processing aids in open systems ERC 8d: Wide dispersive outdoor use of processing aids in open systems <p>Product Category used:</p> <ul style="list-style-type: none"> PC 8: Biocidal products (e.g. disinfectants, pest control) PC 39: Cosmetics, personal care products <p>Technical function of the substance during formulation:</p> <ul style="list-style-type: none"> Colouring agents, pigments Colouring agents, dyes Food/feedstuff additives Pharmaceutical substance Biocide substances pH-regulating agents 	Subsequent service life relevant for that use: no

Table 6. Article service life

Identifiers	Use descriptors	Other information
SL-3: Industrial end use as additive/pigment/auxiliary in plastics/resins/paints, additive in lubricants, metal working fluids and greases, raw material	<p>Article category related to subsequent service life (AC):</p> <ul style="list-style-type: none"> AC 4: Stone, plaster, cement, glass and ceramic articles AC 8: Paper articles AC 13: Plastic articles <p>Environmental release category (ERC):</p> <ul style="list-style-type: none"> ERC 3: Formulation in materials 	<p>Article used by:</p> <ul style="list-style-type: none"> workers <p>Only ERC 10a, 10b, 11a, 11b, 12a and 12b can be selected for article service life</p>

Identifiers	Use descriptors	Other information
<p>for glass,coating systems on ceramic materials (glazes, coatings, oxidation protection etc.).</p>	<p>ERC 5: Industrial use resulting in inclusion into or onto a matrix ERC 8a: Wide dispersive indoor use of processing aids in open systems ERC 8b: Wide dispersive indoor use of reactive substances in open systems ERC 8c: Wide dispersive indoor use resulting in inclusion into or onto a matrix ERC 8d: Wide dispersive outdoor use of processing aids in open systems ERC 8e: Wide dispersive outdoor use of reactive substances in open systems ERC 8f: Wide dispersive outdoor use resulting in inclusion into or onto a matrix ERC 9a: Wide dispersive indoor use of substances in closed systems ERC 9b: Wide dispersive outdoor use of substances in closed systems ERC 10a: Wide dispersive outdoor use of long-life articles and materials with low release ERC 10b: Wide dispersive outdoor use of long-life articles and materials with high or intended release (including abrasive processing) ERC 11a: Wide dispersive indoor use of long-life articles and materials with low release ERC 11b: Wide dispersive indoor use of long-life articles and materials with high or intended release (including abrasive processing) ERC 2: Formulation of preparations ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles ERC 6a: Industrial use resulting in manufacture of another substance (use of intermediates) ERC 6b: Industrial use of reactive processing aids</p> <p>Process category (PROC): PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation PROC 21: Low energy manipulation of substances bound in materials and/or articles PROC 22: Potentially closed processing operations with minerals/metals at elevated temperature. Industrial setting PROC 23: Open processing and transfer operations with minerals/metals at elevated temperature PROC 24: High (mechanical) energy work-up of substances bound in materials and/or articles</p> <p>Technical function of the substance during formulation: Colouring agents, pigments Colouring agents, dyes Food/feedstuff additives Pharmaceutical substance Biocide substances pH-regulating agents</p>	
SL-4: Industrial use	Article category related to subsequent service life	Article used by:

Identifiers	Use descriptors	Other information
for manufacture of metal products, electronic and electrical equipment	<p>(AC): AC 3: Electrical batteries and accumulators</p> <p>Environmental release category (ERC): ERC 3: Formulation in materials ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles ERC 5: Industrial use resulting in inclusion into or onto a matrix ERC 6b: Industrial use of reactive processing aids ERC 7: Industrial use of substances in closed systems ERC 10a: Wide dispersive outdoor use of long-life articles and materials with low release ERC 11a: Wide dispersive indoor use of long-life articles and materials with low release ERC 2: Formulation of preparations ERC 6a: Industrial use resulting in manufacture of another substance (use of intermediates)</p> <p>Process category (PROC): PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation PROC 22: Potentially closed processing operations with minerals/metals at elevated temperature. Industrial setting PROC 23: Open processing and transfer operations with minerals/metals at elevated temperature</p> <p>Technical function of the substance during formulation: Colouring agents, pigments Colouring agents, dyes Food/feedstuff additives Pharmaceutical substance Biocide substances pH-regulating agents</p>	<p>workers</p> <p>Only ERC 10a, 10b, 11a, 11b, 12a and 12b can be selected for article service life</p>
SL-7: Professional end use as additive/pigment/auxiliary in plastics/resins/paints, additive in lubricants, metal working fluids and greases, raw material for glass, coating systems on ceramic materials (glazes, coatings, oxidation protection etc.).	<p>Article category related to subsequent service life (AC): AC 4: Stone, plaster, cement, glass and ceramic articles AC 8: Paper articles AC 13: Plastic articles</p> <p>Environmental release category (ERC): ERC 3: Formulation in materials ERC 8a: Wide dispersive indoor use of processing aids in open systems ERC 8b: Wide dispersive indoor use of reactive substances in open systems ERC 8c: Wide dispersive indoor use resulting in inclusion into or onto a matrix ERC 8d: Wide dispersive outdoor use of processing aids in open systems ERC 8e: Wide dispersive outdoor use of reactive</p>	<p>Article used by: workers</p> <p>Only ERC 10a, 10b, 11a, 11b, 12a and 12b can be selected for article service life</p>

Identifiers	Use descriptors	Other information
	<p>substances in open systems ERC 8f: Wide dispersive outdoor use resulting in inclusion into or onto a matrix ERC 9a: Wide dispersive indoor use of substances in closed systems ERC 9b: Wide dispersive outdoor use of substances in closed systems ERC 10a: Wide dispersive outdoor use of long-life articles and materials with low release ERC 10b: Wide dispersive outdoor use of long-life articles and materials with high or intended release (including abrasive processing) ERC 11a: Wide dispersive indoor use of long-life articles and materials with low release ERC 11b: Wide dispersive indoor use of long-life articles and materials with high or intended release (including abrasive processing) ERC 2: Formulation of preparations ERC 1: Manufacture of substances ERC 5: Industrial use resulting in inclusion into or onto a matrix ERC 6a: Industrial use resulting in manufacture of another substance (use of intermediates) ERC 6b: Industrial use of reactive processing aids ERC 6c: Industrial use of monomers for manufacture of thermoplastics ERC 6d: Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers</p> <p>Process category (PROC): PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation PROC 21: Low energy manipulation of substances bound in materials and/or articles PROC 22: Potentially closed processing operations with minerals/metals at elevated temperature. Industrial setting PROC 23: Open processing and transfer operations with minerals/metals at elevated temperature PROC 24: High (mechanical) energy work-up of substances bound in materials and/or articles</p> <p>Technical function of the substance during formulation: Colouring agents, pigments Colouring agents, dyes Food/feedstuff additives Pharmaceutical substance Biocide substances pH-regulating agents</p>	
SL-9: Consumer end use as - additive/pigment/auxiliary in plastics/resins/paints	<p>Article category related to subsequent service life (AC): AC 1: Vehicles AC 2: Machinery, mechanical appliances, electrical/electronic articles AC 0: Other: other vehicles: railway, aircraft,</p>	Article used by: consumers

Identifiers	Use descriptors	Other information
	<p>vessels, boats, trucks, and associated transport equipment</p> <p>AC 3: Electrical batteries and accumulators</p> <p>AC 5: Fabrics, textiles and apparel</p> <p>AC 10: Rubber articles</p> <p>AC 13: Plastic articles</p> <p>AC 4: Stone, plaster, cement, glass and ceramic articles</p> <p>Environmental release category (ERC):</p> <p>ERC 10a: Wide dispersive outdoor use of long-life articles and materials with low release</p> <p>ERC 11a: Wide dispersive indoor use of long-life articles and materials with low release</p> <p>Technical function of the substance during formulation:</p> <p>Colouring agents, pigments</p> <p>Colouring agents, dyes</p> <p>Food/feedstuff additives</p> <p>Pharmaceutical substance</p> <p>Biocide substances</p> <p>pH-regulating agents</p>	