

## 23. ES 23: Service life (consumers); heat and wear resistant vehicle parts

### 23.1. Title section

Article category: Vehicles (AC 1), Metal articles (AC 7)

<b>Environment</b>	
1: Handling of heat and wear resistant vehicle parts	ERC 10a, ERC 11a
<b>Consumer</b>	
2: Handling/ exchange of heat and wear resistant vehicle parts.	AC 1
3: Handling/ exchange of heat and wear resistant vehicle parts.	AC 7
<b>Exposure scenario of the uses leading to the inclusion of the substance into the article</b>	
ES 17: Use at industrial sites; Metal surface treatment products; Industrial use of cobalt in passivation processes in surface treatment	
ES 19: Use at industrial sites; Metal surface treatment products; Industrial use of cobalt in plating processes in surface treatment	
ES 20: Use at industrial sites; Metal surface treatment products; Industrial use of cobalt in thermal spraying in surface treatment	

### 23.2. Conditions of use affecting exposure

#### 23.2.1. Control of environmental exposure: Handling of heat and wear resistant vehicle parts (ERC 10a, ERC 11a)

<b>Conditions and measures related to external treatment of waste (including article waste)</b>
Dispose of waste product or used containers according to local regulations.
<b>Other conditions affecting environmental exposure</b>
Municipal sewage treatment plant is assumed.

#### 23.2.2. Control of consumer exposure: Handling/ exchange of heat and wear resistant vehicle parts. (AC 1)

<b>Product (article) characteristics</b>
Oral exposure is considered to be not relevant.
Physical form covered in this ES: massive object
Inhalation exposure is considered to be not relevant.

#### 23.2.3. Control of consumer exposure: Handling/ exchange of heat and wear resistant vehicle parts. (AC 7)

<b>Product (article) characteristics</b>
Oral exposure is considered to be not relevant.
Physical form covered in this ES: massive object
Inhalation exposure is considered to be not relevant.

### 23.3. Exposure estimation and reference to its source

#### 23.3.1. Environmental release and exposure: Handling of heat and wear resistant vehicle parts (ERC 10a)

Release route	Release rate	Release estimation method
Water	0 kg/day	Estimated release factor
Air	0 kg/day	Estimated release factor
Soil	0 kg/day	Estimated release factor

### 23.3.2. Consumer exposure: Handling/ exchange of heat and wear resistant vehicle parts. (AC 1)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0 µg/m <sup>3</sup> (Qualitative assessment)	< 0.01
Oral, systemic, long term	0 µg/kg bw/day (Qualitative assessment)	< 0.01

### 23.3.3. Consumer exposure: Handling/ exchange of heat and wear resistant vehicle parts. (AC 7)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0 µg/m <sup>3</sup> (Qualitative assessment)	< 0.01
Oral, systemic, long term	0 µg/kg bw/day (Qualitative assessment)	< 0.01

## 23.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance: none