

37. ES 37: Service life (consumers); hard metal articles

37.1. Title section

Article category: Machinery, mechanical appliances, electrical/electronic articles (AC 2)

Environment	
1: Service life of hard metal articles used by consumers	ERC 10a, ERC 11a
Consumer	
2: Handling of hard metal articles	AC 2
Exposure scenario of the uses leading to the inclusion of the substance into the article	
ES 33: Use at industrial sites; Base metals and alloys; Production of sintered hardmetal articles	

37.2. Conditions of use affecting exposure

37.2.1. Control of environmental exposure: Service life of hard metal articles used by consumers (ERC 10a, ERC 11a)

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

37.2.2. Control of consumer exposure: Handling of hard metal articles (AC 2)

Product (article) characteristics
Oral exposure is considered to be not relevant.
Physical form covered in this ES: bound in article
Inhalation exposure is considered to be not relevant.
Dermal exposure assumed to be negligible

37.3. Exposure estimation and reference to its source

37.3.1. Environmental release and exposure: Service life of hard metal articles used by consumers (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

37.3.2. Consumer exposure: Handling of hard metal articles (AC 2)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0 µg/m ³ (Qualitative assessment)	< 0.01

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

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

Guidance: none