

36. ES 36: Service life (professional worker); Service life of hardmetal articles in professional settings

36.1. Title section

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

Environment	
1: Service life of hardmetal articles in professional settings	ERC 10a, ERC 11a
Worker	
2: Handling and use of hardmetal articles	PROC 24
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	

36.2. Conditions of use affecting exposure

36.2.1. Control of environmental exposure: Service life of hardmetal articles in professional settings (ERC 10a, ERC 11a)

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

36.2.2. Control of worker exposure: Handling and use of hardmetal articles (PROC 24)

Product (article) characteristics
Maximum emission potential covered in this ES: Low (abrasion based).
Limit the concentration of the substance in mixture to <= 25 %.
Physical form covered in this ES: Bound in article.
Conditions and measures related to personal protection, hygiene and health evaluation
Wear suitable gloves tested to EN374.; For further specification, refer to section 8 of the SDS.
Use suitable eye protection.; For further specification, refer to section 8 of the SDS.
Wear respiratory protection providing a minimum assigned protection factor of 10 (a minimum efficiency of 90%) unless inhalation exposure to the substance can be excluded. For further specification, refer to section 8 of the SDS.

36.3. Exposure estimation and reference to its source

36.3.1. Environmental release and exposure: Service life of hardmetal articles in professional settings (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

36.3.2. Worker exposure: Handling and use of hardmetal articles (PROC 24)

Route of exposure and type of effects	Exposure estimate	RCR
Inhalation, local, long term	0.1 µg/m ³ (Measured data)	< 0.01

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

Guidance: Please refer to Section 0.3 of this "ES for Communication".