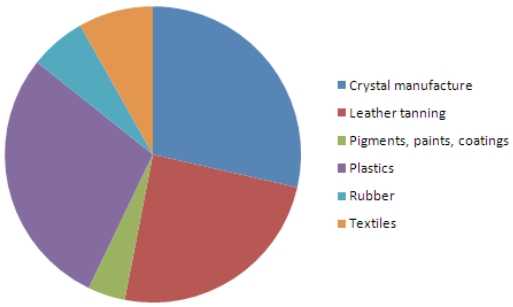
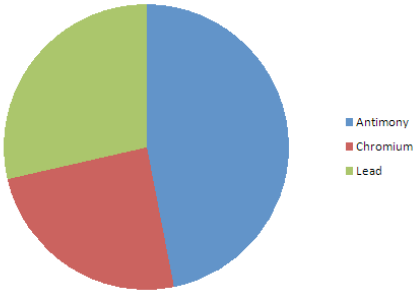
SPERC fact sheet – *Industrial use of metal compounds*

General information	
Title of specific ERC	Industrial use of metal compounds
Based on ERC	4-7
Version	1.1
Scope	Industrial use of metal compounds in following sectors: crystal manufacture, leather tanning, pigments, paints, coatings, plastics, rubber and textiles.
Coverage	Sector representativeness of background data  Metal representativeness of background data 
Narrative description	
Substance use rate	Assessment defaults as set by ERC
Other operational conditions	Open and closed systems, wet and dry processes

Environment Parameters for Fate Calculation	Assessment defaults as set by ERC Assumed data for receiving water and for the municipal sewage treatment plant are 18000 m3/d and 2000 m3/d, respectively (resulting dilution factor 10). For marine assessments an additional tenfold dilution is assumed.	
	Typical observed efficiency from background data	**Type of RMM**
Appropriate Risk management measures (RMM) that may be used to achieve required emission reduction	***Air:***	
		RMMs for air are present in >50% of the sites: • Electrostatic precipitation • Fabric or bag filters (most common) • Ceramic filters • Wet scrubbers • Dry or semi-dry scrubbers
	Water:	
	95% (50.00% – 99.95%)	The 50th percentile or reported site-specific removal efficiency for 12 sites. RMMs for water are present in >50% of the sites: • Chemical precipitation • Sedimentation • Filtration • Electrolysis
	Characteristics of specific ERC	**Justification**
Number of emission days	20 days/year	Assessment default as set by ERC (only few data points available, not sufficient to draw robust statistics)
Emission fractions	air: 0.1% (release after RMM)	The maximum of the 90th percentiles of reported site-specific release factors to air for • 11 sites from crystal manufacture (0.1%) • 12 sites from leather tanning (0%) • 1 site from pigments, paints, coatings (0%) • 10 sites from plastics industry (0%) • 1 site from rubber industry (0%) • 3 sites from textile industry (0.002%)

	water: 0.6% (release after on-site RMM)	The maximum of the 90th percentiles of reported site-specific release factors to wastewater for • 13 sites from crystal manufacture (0.6%) • 4 sites from pigments, paints, coatings (<0.01%) • 10 sites from plastics industry (0.0003%) • 1 site from rubber industry (0%) • 4 sites from textile industry (0.5%)
	soil: n.a.	Assessment default as set by ERC