Version		SUBSTANCE IDENTIFICATION PROFILE (SIP)		
v.1	Rare Earth REACH Consortium			
27-5-2015	Treibacher Industrie AG			
No	**1.1. Chemical Name**	**1.2. EC Number**	**1.3. CAS Number**	**1.4. Composition Type**
	ytterbium(III) oxide	**215-234-0**	**1314-37-0**	**Mono-constituent substance**
	This Substance Identification Profile (SIP) is developed to represent the Identification parameters of the Substance described in line with the Substance Identification requirements of REACH Annex VI and relevant Guidances for the purpose to identify the substance			

Reference	SI Parameter	Value / Not necessary / Not for SIP	Remark / Justification
2.1.A	**Name or other Identifiers of the substance**		
2.1.1.a	IUPAC Name	ytterbium(III) oxide	
2.1.1.b	Other International chemical name	not relevant	
2.1.2.a	Chemical Name	ytterbium oxide	
2.1.2.b	Abbreviation	not relevant	
2.1.2.c	Other names	ytterbia diytterbium trioxide ytterbium sesquioxide ytterbium trioxide ytterbium(3+) oxide	
2.1.3.a	EC Number	215-234-0	
2.1.3.b	EC Name	ytterbium(III) oxide	
2.1.3.c	EC Description	not available	
2.1.4.a	CAS Number	1314-37-0	
2.1.4.b	CAS Name	ytterbium oxide	
2.1.4.c	CAS Description	not available	
2.1.5.a	IUBMB Number	not applicable	
2.1.5.b	INCI Number	not applicable	
2.1.5.c	Other Catalogue identifiers	not applicable	
2.1.B	**Substances (with core identifiers) also falling under this substance (with justification)**		
2.1.6.a	Chemical Name	not applicable	
2.1.6.b	EC Number	not applicable	
2.1.6.c	CAS Number	not applicable	
2.2	**Information related to molecular and structural formula of the substance**		
2.2.1.a	Molecular Formula	Yb2O3	
2.2.1.b	Structural Formula		
2.2.1.c	Smiles notation	[O-2].[O-2].[O-2].[Yb+3].[Yb+3]	
2.2.2.a	Optical activity	none	
2.2.2.b	Typical ratio of (stereo) isomers	not applicable	
2.2.3.a	Molecular Weight	394.08 g/mol	
2.2.3.b	Molecular Weight range	not applicable	
2,3	**Chemical Composition of the substance**		
2.3.1	**Main Constituent**		
	Name -Main Constituent	ytterbium(III) oxide	
	CAS Number -Main Constituent	1314-37-0	
	EC Number -Main Constituent	215-234-0	
	Concentration range -Main Constituent - Lower value	≥ 80%	
	Concentration range -Main Constituent - Upper value	100%	
	Typical concentration -Main Constituent (= Degree of purity)	99%	
2.3.2	**Impurity / Impurities (above 1% or lower if contributing to the hazard or PBT profile)**		
2.3.2.a	Agreed strategy for Impurity profile on SIP	The impurity profile is not relevant for the SIP. It can however be relevant for Classification and Labelling.	Each registrant will need to specify the impurities present in their company-specific (confidential) part of the joint registration dossier (section 1-3). The registration dossier, and in particular the suggested C&L and the hazard assessment, will assume that the substance as placed on the market conforms to: - All impurities > 1% do not significantly affect its toxicological and ecotoxicological properties. - All hazardous impurities are present at < 0.1%. If a registrant's substance does not conform to the above specifications then the registrant will have to justify that the differences do not modify the IUCLID and CSR conclusions and do not require a different C&L or - if relevant - different exposure scenarios. This information will be reported in the company specific (confidential) part of the registration dossier.
2.3.3	**Additive(s) (above 1% or lower if contributing to the hazard)**		
2.3.3.a	Agreed strategy for Additives profile on SIP	No additives above 1% or contributing to the hazard or PBT profile.	
2.4	Suggestions for analytical and spectral methods to be used for substance sameness check		
2.4.1	Agreed Spectral data to be used	Techniques that can be used for sameness checking:	- XRD can be used to confirm the identity of the substance
2.4.2	Agreed Analytical Methods to be used	Techniques that can be used for elemental analysis and purity determination:	- ICP for elemental analysis - TREO wet chemical method for determination of Total Rare Earth Oxides - Determination of content of main component (Yb2O3) based on TREO results and ICP results for rare earth elements
2,5	Substance Sameness Approval		
2.5.1	Agreed approval method for the sameness checking procedure using this SIP (Consortium)	Individual discussions with Consortium members result in a generic SIP. This generic SIP, after approval by the involved Consortium members, is sent to the entire SIEF for approval.	
2.5.2	Agreed approval method for the sameness checking procedure using this SIP (SIEF)	**A generic SIP is sent to the entire SIEF. SIEF members that do not agree with the draft generic SIP must notify ARCADIS before the deadline, including any relevant information. SIEF members that agree with the draft generic SIP do not need to notify ARCADIS.**	

By approving this Substance Information Profile (SIP), the Company declares that he agrees with the content and purpose of this Substance Identification Profile.

He agrees that his substance does to the best of his knowledge completely fall under the substance identity being represented by the SIP sufficient for the purpose of meeting the SIEF requirements and opting for the joint submission Registration dossier to be created by the lead registrant in line with the REACH requirements.

He agrees that he will inform the Consortium via the Secretariat or the SIEF via the Lead registrant if he has (new) information that might change the content of this SIP or if his Substance is changed in such a way that it might or does no longer fall under the SIP or might potentially have an impact on the content of the Registration dossier. He understands and agrees to be fully responsible for the proper linkage of the substance to the REACH Registration dossier and informing of his supply chain on the safe use of his substance and fulfilling his REACH requirements accordingly.