

Version	Company	SUBSTANCE IDENTIFICATION PROFILE (SIP)		
v.1	REACH Rare Earth consortium			
LR	Rhodia			
No	1.1. Chemical Name	1.2. EC Number	1.3. CAS Number	1.4. Composition Type
	cerium tetranitrate	236-007-2	13093-17-9	Mono-Constituent*
* The substance is considered a mono constituent as the stability of the substance is related to nitric acid. Therefore nitric acid should not be considered for purity, however as classified substance, it should be taken into account for classification and labeling. The content of water in this acidic solution is between ≥ 30% w/w and < 50% w/w.				
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			
	IUPAC Name	Cerium Tetranitrate		
	Other International chemical name			
	Chemical Name			
	Abbreviation			
	Other names			
	EC Number	236-007-2		
	EC Name	Cerium Tetranitrate		
	EC Description			
	CAS Number	13093-17-9		
	CAS Name	Cerium Tetranitrate		
	CAS Description			
	IUBMB Number			
	INCI Number			
	Other Catalogue identifiers			
2.1.B	Substances (with core identifiers) also falling under this substance (with justification)			
	Chemical Name			
	EC Number			
	CAS Number			
	Chemical Name			
	EC Number			
	CAS Number			
2.2	Information related to molecular and structural formula of the substance			
	Molecular Formula	Ce(NO3)4		
	Structural Formula			
	Smiles notation			
	Optical activity			
	Typical ratio of (stereo) isomers			
	Molecular Weight			
	Molecular Weight range			
2.3	Chemical Composition of the substance			
2.3.1	Main Constituent			
	Name -Main Constituent	Cerium Tetranitrate		
	CAS Number -Main Constituent	13093-17-9		
	EC Number -Main Constituent	236-007-2		
	Concentration range -Main Constituent - Lower value	> 70 %		
	Concentration range -Main Constituent - Upper value	< 90%		
	Typical concentration -Main Constituent (= Degree of purity)			
2.3.2	Impurity / Impurities (above 1% or lower if contributing to the hazard or PBT profile)			
	Name -Impurity (1)	Nitric Acid		
	CAS Number -Impurity (1)	7697-37-2		
	EC Number -Impurity (1)	231-714-2		
	Molecular Formular -Impurity (1)			
	Concentration range -Impurity (1) - Lower value	10,00%		
	Concentration range -Impurity (1) - Upper value	30,00%		
	Typical concentration -Impurity (1)			
	Hazard -Impurity (1)	>= 5.0% < 20.0%: Skin Corr. 1B (H314) >= 20.0% <= 65.0%: Skin Corr. 1A (H314), Met. Corr. 1 (H290) 65 % ≤ C : Skin Corr. 1 A (H314), Met. Corr. 1 (H290), Ox. Liq. (H272)		
2.3.3	Impurity / Impurities (above 1% or lower if contributing to the hazard or PBT profile)			
	Name -Impurity (1)	Cerium Trinitrate		
	CAS Number -Impurity (1)	10108-73-3		
	EC Number -Impurity (1)	233-297-2		
	Concentration range -Impurity (1) - Lower value	<1.00%		
	Concentration range -Impurity (1) - Upper value	8,00%		
	Hazard -Impurity (1)	Ox. Sol. Category 3 (H272) Skin Irrit. Category 2 (H315) Eye Dam. Category 1 (H318) Aquatic Acute Toxicity Category 1 (H400) Aquatic Chronic Toxicity Category 1 (H410)		
	Cerium tetranitrate has a proposed purity in the range≥ 70% to < 90%, with a corresponding Nitric Acid content of 10% to 30% to provide stability. Cerium trinitrate is a typical impurity in the range < 1% to 8%. Both nitric acid and cerium trinitrate being classified substances influencing the classification of cerium tetranitrate, the substance is considered as falling under this sameness proposal only if the above mentioned contents are respected. All other impurities > 1% are inorganic oxides or other related inorganic substances, which do not significantly affect its toxicological and ecotoxicological properties based on available data. All other hazardous impurities are present at < 0.1%.			
2.4	Suggestions for analytical and spectral methods to be used for substance sameness check			
	Spectral method used	XRF, XRD		
	Analytical method used	titrimetric, Kjeldahl		
2.5	Substance Sameness Approval			
	Name and Function			
	Signature			
	Date			
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.				