

Version	DR. KNOELL Consult GmbH v.1	SUBSTANCE IDENTIFICATION PROFILE (SIP)
v.1	P-I236 SodAl REACH Consortium & SIEF	
[date]	22-10-17	

No	1.1. Chemical Name	1.2. EC Number	1.3. CAS Number	1.4. Composition Type
	Aluminum sodium oxide	234-391-6	11138-49-1	Mono-Constituent Substance - + Additive

Identification requirements of REACH Annex VI and relevant Guidances for the purpose to identify the

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	Sodium oxido(oxo)alumane	
2.1.1.b	Other International chemical name	Sodium Aluminate	
2.1.2.a	Chemical Name	Sodium aluminum oxide	
2.1.2.b	Abbreviation	-	
2.1.2.c	Other names	Sodium aluminate (PICCS), Aluminate (AIO21-), sodium (1:1) (TSCA); Aluminate (AIO21-), sodium (DSL, ENCS, SWISS, PICCS, ASIA-PAC, NZIoC); Aluminate, (AIO21-), sodium (AICS); Natriumaluminat (German) (SWISS); Sodium metaaluminate	
2.1.3.a	EC Number	234-391-6	
2.1.3.b	EC Name	Aluminum sodium oxide	Na ⁺ O=Al-O ⁻
2.1.3.c	EC Description	-	
2.1.4.a	CAS Number	11138-49-1	
2.1.4.b	CAS Name	Sodium aluminum oxide	
2.1.4.c	CAS Description	-	
2.1.5.a	IUBMB Number		
2.1.5.b	INCI Number	1/Al.Na.2O/q-1;+1;;rAIO2.Na/c2-1-3;q-1;+1	
2.1.5.c	Other Catalogue identifiers	ENCS No.: 1-21X ECL Serial No.: KE-01036 SWISS No.: G-7841	Inventory Status On TSCA Inventory January 2009 TSCA Inventory. On EINECS Annex to Official Journal of the European Communities, 15 June 1990. REACH: Intermediate List of Pre-Registered Substances, October 2008 Internet: echa.europa.eu. On ENCS Unlisted chemical name. For ENCS chemical class or category name, refer to ENCS No. 1-21. On AICS Australian Inventory of Chemical Substances, June 1996 Ed. On ECL Korean Existing Chemicals List, January 1997. On ECL Korean Existing Chemicals List, January 1997. On SWISS Giftliste 1 (List of Toxic Substances 1), 31 May 1999. Toxic Category 3. On PICCS Philippines Inventory of Chemicals and Chemical Substances, 2000. On ASIA-PAC On NZIoC New Zealand Inventory of Chemicals, 2006. This substance has HSNO approval.
2.1.B	Substances (with core identifiers) also falling under this substance (with justification)		
2.1.6.a	Chemical Name	Aluminum sodium dioxide	Na ⁺ O=Al-O ⁻
2.1.6.b	EC Number	215-100-1	
2.1.6.c	CAS Number	1302-42-7	
2.1.7.a	Chemical Name	Aluminium sodium tetrahydroxide	Al ⁺⁺⁺ Na ⁺ HO ⁻ OH ⁻ OH ⁻ OH ⁻
2.1.7.b	EC Number	235-487-0	
2.1.7.c	CAS Number	12251-53-5	
2.1.8.a	Chemical Name	Aluminum oxide (Al ₂ O ₃), reaction products with sodium hydroxide	
2.1.8.b	EC Number	296-715-2	
2.1.8.c	CAS Number	93028-24-1	
2.2	Information related to molecular and structural formula of the substance		
2.2.1.a	Molecular Formula	Na ⁺ O=Al-O ⁻	
2.2.1.b	Structural Formula		
2.2.1.c	Smiles notation	[Al-](=O)=O.[Na+]	
2.2.2.a	Optical activity	-	
2.2.2.b	Typical ratio of isomers		
2.2.3.a	Molecular Weight	81.9701 g/mol	
2.2.3.b	Molecular Weight range		
2.3	Chemical Composition of the substance		
2.3.1	Main Constituent		
2.3.1.a	Name -Main Constituent	Sodium aluminum oxide	
2.3.1.b	CAS Number -Main Constituent	235-487-0	
2.3.1.c	EC Number -Main Constituent	12251-53-5	
2.3.1.d	Concentration range -Main Constituent	> 80%	based on NaAlO
2.3.1.e	Concentration range -Main Constituent		
2.3.1.f	Typical concentration -Main Constituent (=		
2.3.2	Impurity / Impurities (above 1% or lower if contributing to the hazard or PTB profile)		

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2.3.2.a	Agreed strategy for Impurity profile on SIP	The substance is NOT included in this SIP, if there are impurities CMR cat 1 or 2, PBT or vPvB (in excess of 0.1%); Impurity classified as T+ or T (in excess of 0.1%); Impurity of heavy metals e.g. Ni, Hg, Cd, As, Cr, Pb, Se and Sb > 0.1%	
2.3.2.1.a	Name -Impurity (1)		
2.3.2.1.b	CAS Number -Impurity (1)		
2.3.2.1.c	EC Number -Impurity (1)		
2.3.2.1.d	Molecular Formular -Impurity (1)		
2.3.2.1.e	Concentration range -Impurity (1)		
2.3.2.1.f	Concentration range -Impurity (1)		
2.3.2.1.g	Typical concentration -Impurity (1)		
2.3.2.1.h	Hazard -Impurity (1)		
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		
2.3.3.1.a	Name -Additive (1)	Disodium oxide	
2.3.3.1.b	CAS Number -Additive (1)	1313-59-3	
2.3.3.1.c	EC Number -Additive (1)	215-208-9	
2.3.3.1.d	Molecular Formular -Additive (1)	Na ₂ O	
2.3.3.1.e	Concentration range -Additive (1)		
2.3.3.1.f	Concentration range -Additive (1)		
2.3.3.1.g	Typical concentration -Additive (1)	about 30% (Concentration range of additive is not specified)	based on Na ₂ O
2.3.3.1.h	Hazard -Additive (1)	C; R35, Causes severe burns.	
2.4	Substance sameness checking procedure		
2.4.1	Agreed Spectral data to be used	Solid aluminum sodium oxide can be characterised using XRD and IR; main elements aluminium and sodium, as well as inorganic impurities can be quantified using ICP or AAS. Liquid aluminum sodium oxide can be characterised using IR, main elements aluminium and sodium, as well as impurities can be analysed using ICP or AAS. The classic titration method is also well suitable to quantify the Al and NaOH at high concentration level.	
2.4.2	Agreed Analytical Methods to be used	The European Standards will be used as much as possible for analyzing macro and micro constituents (EN 1302:1999; Titrimetry; AA, ICP, MS); For quantification of heavy metals (micro elements) ICP is recommended (see EU standard 1302)	
2.4.3.a	Agreed Verification Method for sameness		
2.4.3.b	Agreed conditions for the Verification Method		
2.4.3.c	Agreed Verification Method for sameness		
2.4.3.d	Agreed conditions for the Verification Method		
2.4.4.a	Agreed role of the SIP in the SIEF		
2.4.4.b	Agreed person to be suggested as SIEF		

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2.5	Approval of the SIP		
2.5.1	Agreed approval method for the sameness		
2.5.2	Agreed approval method for the sameness		

By signing or otherwise approving this Substance Information Profile (SIP), the Company declares that he agrees with the content and He understands and agrees to be fully responsible for the proper linkage of the substance to the REACH Registration dossier and informing of