

REACH
SODIUM CARBONATE (EC 207-838-8, CAS 497-19-8)

Information for Downstream users (DUs) and DUs' Trade Associations
Communication on uses and exposure scenarios

Sodium carbonate (CAS nr. 497-19-8) is manufactured in a quantity of more than 1000 tonnes per year and therefore submission of a first registration dossier is needed before 1 December 2010.

Hazards of sodium carbonate

Sodium carbonate is included in Annex VI of the CLP Regulation (No. 1272/2008) and therefore the classification and labeling of the substance is already harmonized in the EU. The substance is only labeled for local effects (Xi; R36 Irritating to eyes) but not for other hazards.

In the past the hazards of sodium carbonate have been reviewed already by the sodium carbonate producers in cooperation with the authorities. This HPV or OECD SIDS dossier of sodium carbonate is available via internet: <http://www.chem.unep.ch/irptc/sids/OECDSEIDS/Naco.pdf>

Exposure scenarios and uses

Within the REACH consortium for sodium carbonate, the available exposure information for manufacturing and use has been collected. Furthermore the identified uses have been described according to the recommendation of ECHA (Guidance on information requirements and chemical safety assessment, Chapter R.12).

Based on the available data, the following exposure scenarios are foreseen:

- manufacturing,
- glass production,
- formulation,
- other industrial uses,
- professional use and
- consumer use.

Please find hereafter a table with the identified uses which are covered by these 6 exposure scenarios.

Summary of exposure scenarios and identified uses of sodium carbonate based on use descriptor system (see ECHA guidance chapter R.12)

Exposure scenario	Sector of Use (SU)	Product Category (PC)	Process category (PROC)	Environmental release category (ERC)	Article category (AC)
Manufacturing	SU 8	Not applicable	PROC 1-4, 8a, 8b, 9, 22a	ERC 1	Not applicable
Glass production	SU 13	Not applicable	PROC 1-4, 8a, 8b, 22, 23, 26	ERC 6a	Not applicable
Formulation	SU 10	Not applicable	PROC 1-3, 5, 8a, 8b, 9, 14, 15	ERC 2	Not applicable
Other industrial uses	SU 0-20, 23, 24	Not applicable	PROC 1-4, 7, 8a, 8b, 9, 10, 13, 15, 17, 18, 19, 22, 23, 26	ERC 4, 5, 6a, 6b, 6d, 7,	Not applicable
Professional use	SU 22	PC 0-40	PROC 1-4, 8a, 8b, 9, 10, 11, 13, 15, 19, 22, 23, 26	ERC 8a, 8b, 8c, 8d, 8e, 8f, 9a, 9b	Not applicable
Consumer use	SU 21	PC 0-40	Not applicable	ERC 8a, 8b, 8c, 8d, 8e, 8f, 9a, 9b	Not applicable

Operational Conditions (OC) and Risk Management Measures (RMM)

Taking into account the type of hazards associated with sodium carbonate, each exposure scenario covers numerous uses. For the same reason, the Operational Conditions (OC) and Risk Management Measures (RMM) are not specific to particular uses and will be described independently of particular uses. Those OC and RMM will be completed during the registration dossier preparation process.

However, already now, examples of such recommendations can be given:

- the risk management measures for human health should focus on the protection of the eyes because the substance is irritating to the eyes
- inhalation of high concentrations of sodium carbonate dust should be prevented (e.g. via ventilation) because the substance could irritate the respiratory tract
- for environmental emissions to the aquatic compartment it is important to assure that the effluent is pH adjusted before a discharge to the environment. A significant pH increase of the aquatic environment due to an emission of sodium carbonate should be prevented.