

The Global Sodium Percarbonate Market and Potential in Liquid Formulations – June 2015

Sodium percarbonate has a wide range of uses as a bleaching agent in the household cleaning market with the main segments being domestic laundry, institutional cleaning and automatic dish wash.

It is estimated that the global demand for sodium percarbonate currently consumes around 90% of the installed capacity of around 1.1 million tonnes (i.e. 1 million tonnes), with average pricing in the range of \$500-650 per tonne (although there is significant country and regional variation – e.g. higher in the US and lower in the Far East). The main producers and their estimated market shares are summarised in the table below:

Producer	Estimated Capacity (Tonnes)	% Share
Solvay (EU & US)	150,000	13.6%
Evonik (EU)	150,000	13.6%
OCI (US & Far East)	120,000	10.9%
Kemira (EU)	100,000	9.1%
Chinese Majors	260,000	23.6%
Japanese	50,000	4.5%
Korean	40,000	3.6%
Turkish	40,000	3.6%
Others	190,000	17.3%
Total	1,100,000	100%

The most significant use of sodium percarbonate is in powder laundry products where it is typically used at addition levels of 8-15%. However, the instability of percarbonate bleach prevents its use in liquid laundry products which accordingly do not contain any bleaching active ingredients. Notwithstanding this, western markets in particular have readily adopted liquid formulations (due to reasons such as their convenience). Indeed the impact on sodium percarbonate demand due to the migration of the European laundry market to liquid products was the main reason given by Solvay in 2014 for the closure of its 50,000 tonnes pa capacity plant in Warrington, UK. Powder detergents still represent the largest global market estimated to be over 13 million tonnes in 2016 with a growth rate of 2.5%, while liquid volumes are estimated at 6 million tonnes with a growth rate of 4.1%. However, there is significant regional variation with North America being predominantly a liquid market and Latin America a powder market (summarised in the table below).

Estimated volumes 2016 (million Tonnes)			
Region	Powder Volume	Liquid Volume	Total Volume
CWE	1.46 (48%)	1.56 (52%)	3.02
NA	0.13 (6%)	2.16 (94%)	2.29
LA	3.19 (84%)	0.60 (16%)	3.79
EEMEA	2.79 (94%)	0.18 (6%)	2.97
Japan & Korea	0.40 (45%)	0.48 (55%)	0.88
China	3.46 (79%)	0.90 (21%)	4.36
SEAIA	1.73 (94%)	0.12 (6%)	1.85
Global	13.16 (69%)	6.00 (31%)	19.16

If a stable sodium percarbonate technology was developed for use in liquid laundry products, assuming the threshold utilisation rate in powder (i.e. 8%) a new premium-priced market of potentially 480,000 tonnes pa would be created (i.e. the current 6 million tonne liquid market x 8%), before any conversion of the powder market to liquid (which might also be expected). Clearly, the rate of uptake of bleach in liquid laundry would depend on a number of factors including consumer views and cost considerations. However, despite its convenience, the performance of liquid laundry products is known to be inferior (e.g. in stain removal, as reported by the UK consumer group “Which?”). The availability of improved performance liquid products is therefore likely to be a significant driver for the adoption of a stable sodium percarbonate technology, especially in Europe and North America.

Sources:

Presentation: Novozymes Analyst Day, Novozymes, Bagsvaerd, August 31, 2012. Euromonitor Data 2012 contained within the presentation.

Global and Chinese Sodium Percarbonate Industry Report 2014; QYResearch

Industrial and Institutional Cleaning Formularies: Air Products

ICIS, 21 March 2014; entitled ‘Solvay to close Warrington, UK, sodium percarbonate plant’

Technical Data Sheet for OCI Sodium Percarbonate 2009

Which? Report 7 January 2013; entitled Powder vs liquid detergent – which cleaned up in our tests?