

Neopentyl Polyhydric Alcohols

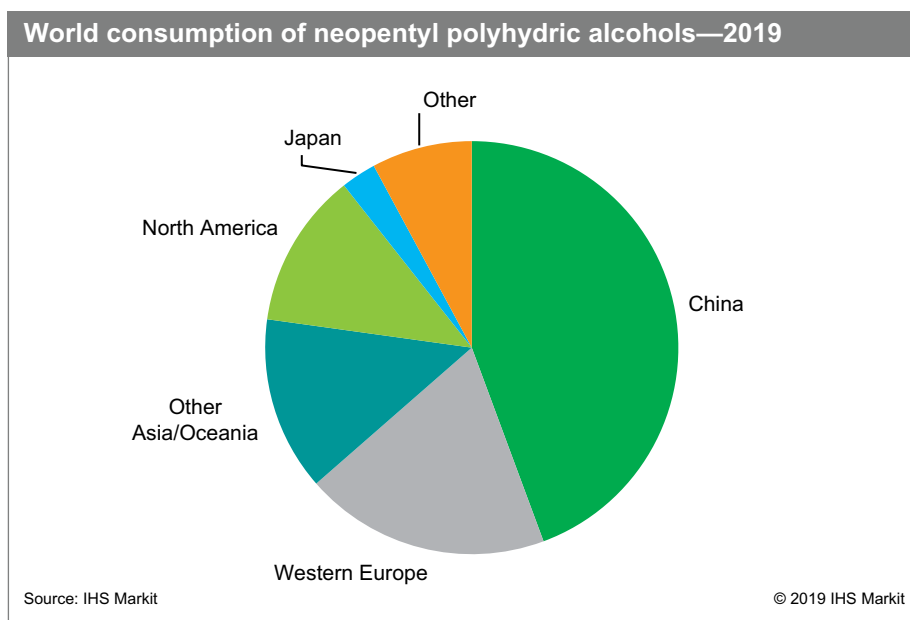
27 December 2019

Abstract

The neopentyl polyhydric alcohols discussed in this report include pentaerythritol, neopentyl glycol, trimethylolpropane, trimethylolethane, and dimethylolpropionic acid.

Approximately 67% of neopentyl polyhydric alcohols are used for coating resins. There is also major use in neopolyol esters for lubricants and demand for unsaturated polyester resins. These downstream markets are mainly found in major industries such as construction and remodeling activity, automotive production, and original equipment manufacture. As a result, demand for neopentyl polyhydric alcohols is greatly impacted by general economic conditions.

The following pie chart shows world consumption of neopentyl polyhydric alcohols:



China is the largest consumer of neopentyl polyhydric alcohols, followed by Western Europe and the United States. As of 2019, the global market for NPAs, and that of NPG in particular, was largely oversupplied and characterized by decreasing prices and profitability margins. Major NPG capacity additions in Asia, combined with declining automotive production have led to inventory buildup, particularly in China. The market for pentaerythritol and TMP are more balanced, thanks to limited capacity additions. World consumption of NPAs is forecast to grow at an average annual rate of around 3.6% during 2019–24. Consumption of pentaerythritol and NPG in China will be the driver of this growth. In Western countries, particularly in Europe, demand may remain stagnant until the automotive sector recovers. Fast growth, but from a small base, will occur in Latin America and in the Middle East. The market for NPAs will continue to grow at moderate rates

Contacts

Koon-Ling Ring • Koon-Ling.ring@ihsmarkit.com
Maria deGuzman • Maria.deguzman@ihsmarkit.com

during 2019–24 as new capacity is already underway. Most of the additions will occur in Asia. It is very likely that the market, particularly that of NPG, will remain oversupplied through 2024.

For more detailed information, see the table of contents, shown below.

IHS Markit's Chemical Economics Handbook – Neopentyl Polyhydric Alcohols is the comprehensive and trusted guide for anyone seeking information on this industry. This latest report details global and regional information, including



Global summary;
regional coverage



Producers with
annual capacities
and plant sites



Production figures
and trends



Consumption and
forecasts by end use
application



Manufacturing
processes and
environmental issues



Trade – imports
and exports

Key benefits

IHS Markit's Chemical Economics Handbook – Neopentyl Polyhydric Alcohols has been compiled using primary interviews with key suppliers and organizations, and leading representatives from the industry in combination with IHS Markit's unparalleled access to upstream and downstream market intelligence and expert insights into industry dynamics, trade, and economics.

This report can help you

- Identify trends and driving forces influencing chemical markets
- Forecast and plan for future demand
- Understand the impact of competing materials
- Identify and evaluate potential customers and competitors
- Evaluate producers
- Track changing prices and trade movements
- Analyze the impact of feedstocks, regulations, and other factors on chemical profitability

Contents

Executive summary	7
Summary	8
Introduction	15
Manufacturing processes	17
Pentaerythritol	17
Neopentyl glycol	17
Trimethylolpropane	18
Trimethylolethane	18
Dimethylolpropionic acid	19
Supply and demand by region	20
United States	20
– Producing companies	20
– Salient statistics	21
– Production	22
– Consumption	22
– Neopentyl glycol	24
– Coating resins	25
– Unsaturated polyester resins	28
– Neopolyol esters for lubricants	29
– Other	30
– Pentaerythritol	31
– Alkyd resins	32
– Neopolyol esters for lubricants	35
– Rosin and tall oil esters	36
– Pentaerythritol tetranitrate	36
– Other	36
– Trimethylolpropane	36
– Coating resins	37
– Neopolyol esters for lubricants	38
– Multifunctional acrylates/methacrylates	38
– Polyether polyols for urethanes	41
– Other	41
– Trimethylolethane	41
– Coating resins	41
– Other	42
– Dimethylolpropionic acid	42
– Wood coatings	44
– Textiles	44
– Leather	45
– Glass-fiber sizes	45

– Automotive	45
– Other	45
– Price	45
– Trade	46
– Imports	46
– Exports	48
Canada	50
– Salient statistics	50
– Consumption	50
– Trade	51
Mexico	52
– Salient statistics	52
– Consumption	53
– Trade	54
Central and South America	55
– Salient statistics	55
– Consumption	56
Western Europe	59
– Producing companies	59
– Salient statistics	60
– Consumption	61
– Neopentyl glycol	63
– Coating resins	64
– Unsaturated polyester resins	65
– Neopolyol esters for lubricants	65
– Other	65
– Pentaerythritol	65
– Alkyd resins	66
– Neopolyol esters for lubricants	67
– Rosin and tall oil esters	67
– Pentaerythritol tetranitrate	68
– Other	68
– Trimethylolpropane	68
– Coating resins	69
– Neopolyol esters for lubricants	70
– Multifunctional acrylates/methacrylates	70
– Other	71
– Dimethylolpropionic acid	71
– Trimethylolethane	72
– Price	73
– Trade	74
– Imports	74
– Exports	75

Central and Eastern Europe	76
– Producing companies	76
– Salient statistics	77
– Consumption	77
Middle East	79
– Producing companies	79
– Salient statistics	80
– Consumption	81
Africa	83
– Salient statistics	83
– Consumption	83
Japan	85
– Producing companies	85
– Salient statistics	86
– Production	86
– Consumption	87
– Neopentyl glycol	88
– Coating resins	89
– Unsaturated polyester resins	90
– Neopolyol esters for lubricants	90
– Other	90
– Pentaerythritol	91
– Alkyd resins and rosin esters	92
– Neopolyol esters for lubricants	92
– Multifunctional acrylates/methacrylates	93
– Other	93
– Trimethylolpropane	93
– Coating resins	94
– Multifunctional acrylates/methacrylates	95
– Other	95
– Dimethylolpropionic acid	95
– Trimethylolethane	96
– Alkyd resins	96
– Other	96
– Other	96
– Price	96
– Trade	98
– Imports	98
– Exports	98
China	99
– Producing companies	99
– Salient statistics	103
– Production	104

– Consumption	105
– Price	109
– Trade	110
– Imports	110
– Exports	111
Other Asia and Oceania	112
– Producing companies	112
– Salient statistics	114
– Production	114
– Consumption	115
– Trade	118
Additional resources	120
Revisions	121

IHS Markit Customer Care

CustomerCare@ihsmarkit.com

Americas: +1 800 IHS CARE (+1 800 447 2273)

Europe, Middle East, and Africa: +44 (0) 1344 328 300

Asia and the Pacific Rim: +604 291 3600

Disclaimer

The information contained in this report is confidential. Any unauthorized use, disclosure, reproduction, or dissemination, in full or in part, in any media or by any means, without the prior written permission of IHS Markit or any of its affiliates ("IHS Markit") is strictly prohibited. IHS Markit owns all IHS Markit logos and trade names contained in this report that are subject to license. Opinions, statements, estimates, and projections in this report (including other media) are solely those of the individual author(s) at the time of writing and do not necessarily reflect the opinions of IHS Markit. Neither IHS Markit nor the author(s) has any obligation to update this report in the event that any content, opinion, statement, estimate, or projection (collectively, "information") changes or subsequently becomes inaccurate. IHS Markit makes no warranty, expressed or implied, as to the accuracy, completeness, or timeliness of any information in this report, and shall not in any way be liable to any recipient for any inaccuracies or omissions. Without limiting the foregoing, IHS Markit shall have no liability whatsoever to any recipient, whether in contract, in tort (including negligence), under warranty, under statute or otherwise, in respect of any loss or damage suffered by any recipient as a result of or in connection with any information provided, or any course of action determined, by it or any third party, whether or not based on any information provided. The inclusion of a link to an external website by IHS Markit should not be understood to be an endorsement of that website or the site's owners (or their products/services). IHS Markit is not responsible for either the content or output of external websites. Copyright © 2019, IHS Markit®. All rights reserved and all intellectual property rights are retained by IHS Markit.

