

**Product** Mega/ Megamatt 90 - 350 g/m<sup>2</sup>

**Company** M-real

**Site** Zanders Gohrsmuehle, Germany

Information gathered from 01.01.2004 to 31.12.2004

Environmental product declaration for paper

**Environmental Management**

**Certified environmental management system** (at the mill since) ISO 14001 (2003)

**Environmental aspects of wood procurement**

Share of wood from certified forests in product is 21% (PEFC, FSC).

**Environmental parameters**

The figures are based on methods and procedures of measurement approved by the local (or national) environmental regulators at the production site. The figures include both paper and pulp production.

<b>Water</b>	<b>COD</b>	<b>9.1</b>	kg/t
	<b>AOX</b>	<b>0.051</b>	kg/t
	<b>N<sub>Tot</sub></b>	<b>0.097</b>	kg/t
	<b>P<sub>Tot</sub></b>	<b>0.037</b>	kg/t

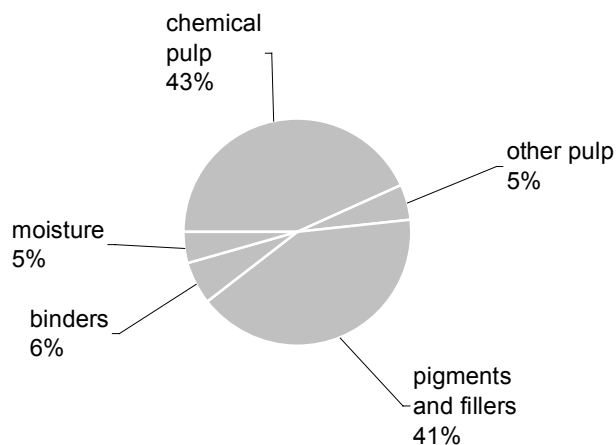
<b>Air</b>	<b>SO<sub>2</sub></b>	<b>3.25</b>	kg/t
	<b>NO<sub>x</sub></b>	<b>2.46</b>	kg/t
	<b>CO<sub>2</sub> (fossil)</b>	<b>1,402</b>	kg/t

**Solid waste landfilled** 22 BDkg/t

**Purchased electricity consumption**

/ tonne of final product 713 kWh

**Product composition**



**More information**

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## Product **Mega/Megamatt 90 - 350 g/m<sup>2</sup>**

Mega and Megamatt are mainly double-coated papers suitable for all kinds of printing processes. The product is sold mainly in sheets, although reels are available. Typical end uses for the product are business reports, brochures, books, art print and calendars.

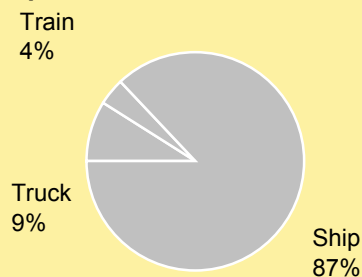
## Mill info

M-real Zanders Gohrsmuehle is located in the centre of Bergisch Gladbach near Cologne, in Germany. The capacity of the mill for double and single coated papers is more than 300,000 t/a. It is a non-integrated mill with its own waste water treatment. After cleaning, the water can either be reused or piped to the river Rhine. There is also a coal fired power plant which operates in combined heat and power generation with an efficiency of more than 80%.

## Transport

### RAW MATERIAL - FIBRES

#### Transport modes



#### Average transport distance

Wood	<b>278 km</b>
Pulp	<b>5,762 km</b>
Recovered paper	<b>0 km</b>

(Info. gathered from **01.01.2004** to **31.12.2004**)

### PRODUCTS

The main market for Mega and Mega matt is central Europe. The company's policy is to maximise transport by ship or rail where practical and cost effective. Therefore, Zanders has invested in two logistic centres – one for the Gohrsmuehle mill – to change the mode of transport from road to rail. To overseas markets, the finished papers are transported by rail and ship, and to central and eastern Europe by road and rail.

## Handling after use

### PRODUCT

The preferred method is recycling, but the paper is also biodegradable as compost or can be incinerated to produce energy.

### PACKAGING

The entire packaging material (polyethylene wrapping, plywood cover, wooden pallet and polypropylene band) can be reused or recycled. It can also be incinerated to produce energy.

**Product Mega/Megamatt 90 - 350 g/m<sup>2</sup>****Origin of wood**

It is M-real's policy to only use wood which comes from sustainably managed commercial forests. All M-real's wood and pulp suppliers are required to have wood origin tracing systems in use; ensure that logging is carried out in strict compliance with relevant national and local legislation and that reliable information on the origin of the wood is made available to M-real. M-real promotes forest certification as a vital element in the overall sustainability of its operations. The aim is to continuously increase the proportion of certified wood entering the supply chain. The following table shows the origin of all wood raw material by country, the total share of certified wood supplied from those countries with a certified chain-of-custody and the share of certified wood by certification system.

The figures include all wood used in product (Info. gathered from **01.01.2004** to **31.12.2004**)

<b>Countries of wood origin</b>	<b>Share of total wood supply (%)</b>	<b>Share of certified wood* (%)</b>	<b>Share of certified wood* by certification systems (%)</b>
Sweden	16	47	40 PEFC, 7 FSC
Spain	15	7	7 PEFC
Brazil	12		
Finland	10	85	87 PEFC
US	8		
Argentina	7		
Canada	7		
France	6	40	40 PEFC
Russia, European part	5		
Estonia	4		
Chile	4		
Latvia	3	3	3 FSC
Belgium	2	40	40 PEFC
Germany	<1	3	3 PEFC
Lithuania	<1		
Luxembourg	<1		
Uruguay	<1	45	45 FSC
Scotland	<1		

\* The figures indicate the average share of certified wood supplied with certified chain of custody.

*Date of issue 07.03.2005*

## ENVIRONMENTAL ARGUMENTS ZANDERS MEGA

### Composition of pulp:

#### 1. from 50 % chlorine free bleached pulp ( TCF )

- from re-growing raw materials
- wood from plantations or sustained forestry
- from forest thinning, industrial wood and saw mill residues
- no pulp from tropical rain forests

= ecological and economical use of raw materials

#### 2. from 50 % recycled fibers

- saving resources
- relieving landfill

= ecological and economical sensible reuse of existing resources

### Fillers and additives:

- physiologically harmless
- harmless for the environment
- biodegradable

### Paper production process:

- within legal regulations
- partial clear underrun of legally permitted limit for emissions
- AOX-emissions less than 0.002 Kg per ton of paper

### Packaging materials:

- According to German packaging regulations
- recyclable

### Disposal:

- recyclable
- biodegradable
- can be used for landfilling
- suitable for thermic use