



Leather Chemicals Market and REACH



Partnership in the Supply Chain with the Chemical Industry

The planned reform of EU Chemicals legislation,
the REACH procedure
and its impact on leather production

Registration, Evaluation and Authorisation of Chemicals



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Meat and Leather industry

The leather industry is the processor of meat production by-products

Global meat production ¹⁾ is about 225 000 million tonnes

The non-consumable hides and skins are converted into high quality leather (80% of which goes into the footwear and furniture industries)²⁾

Main sources:

Cattle, sheep, goats and to some extent pigs

Health:

There are no statistics to indicate that leather entails allergy risks or has properties injurious to health



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Leather production (global)

Livestock ¹⁾

1 350 million cattle

1 700 million sheep and goats

Hides and skins for leather production (converted to salted hides) ²⁾

5.6 million tonnes cattle

1.6 million tonnes sheep and goats

0.3 million tonnes others (pigs, etc.)

7.5 million tonnes of hides and skins are available for recycling into leather

From these 7.5 million tonnes of hides and skins, 2 million tonnes of leather are produced ³⁾



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Leather production (European Union)

In the EU 1.5 million tonnes of hides and skins are converted into 0.4 million tonnes of leather ²⁾, equivalent to **20-25 %** of the global leather production

This represents :

**9 billion € in sales value,
50 000 jobs,
2 800 operating tanneries, and
70 % export volume ⁴⁾**

ECOLOGY:

The hides and skins arising from meat production are largely processed locally within the EU



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Leather chemical consumption (global)

1.8 million tonnes leather chemicals

2 € per kg average price

3.6 billion € sales

6000 different product (preparations, mixtures, specialties) ⁶⁾

average 300 tonnes or 600 000 € per product



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Leather chemical consumption (European Union) ⁶⁾

EU requirement ³⁾

0.9 billion €

Home (EU) production

0.6 billion €⁶⁾

Import

0.3 billion €



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Leather chemical production (European Union) ⁶⁾

Production for home demand (EU)

0.6 billion €⁶⁾

Production for export

1.2 billion €

Leather chemicals to a value of 1.8 billion € are manufactured within the EU

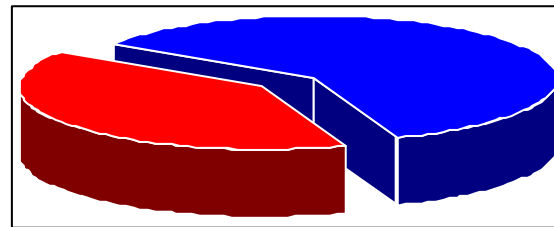


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Chemical manufacturers

BASF, BAYER, CLARIANT, STAHL and TFL post sales of about 1.5 billion €, a market share of approx. 40 % (globally)



■ 5 main suppliers

■ others

The remaining 60 % is achieved by some 100-200 other, often local, suppliers (sales 10 -100 Mio. €)

No dominant market leader, many suppliers



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Tanneries and leather chemical producers in the EU (combined)

approx. 11 billion € sales

some 60 000 jobs

approx. 2 800 tanneries

about 100 leather chemical distributing companies

average volume per leather chemical 300 tonnes

of which:

100 tonnes EU home market

200 tonnes exported

Production of both leather and leather chemicals is heavily export oriented



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The strength of the European leather industry:

More than half of the most important global leather research centres are located in Europe

The five most important global leather chemical producers are headquartered in Europe

Close co-operation between research, chemicals producers and tanneries ensures that the European leather industry:

- 1.is extremely flexible, innovative, specialised and fashion-oriented**
- 2.has the highest quality standards, and**
- 3.leads in environmentally sound production methods**



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Cost for REACH registration ⁶⁾

Per ton

1-10 t/a	50'000 €
10-100 t/a	140'000 €
100-1000 t/a	400'000 €
> 1000 t/a	700'000 €

Per kilogramme

1-10 t/a	5.00-50.00 €/kg
10-100 t/a	1.40-14.00 €/kg
100-1000 t/a	0.40-4.00 €/kg
> 1000 t/a	< 0.70 €/kg

Additionally for users (tanneries)

Disclosure of the application method for registration
(no competition, yet more red tape)



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Composition of chemicals for leather:

Leather production involves numerous steps which require a broad spectrum of chemicals, including a large number of specialties subject to rapid changes dictated by fashion

some 6000 products (often customized mixtures) ⁷⁾ with approx. 2000 individual substances (constituents of many mixtures)

Of these individual substances about 20% are made exclusively or mainly for leather production

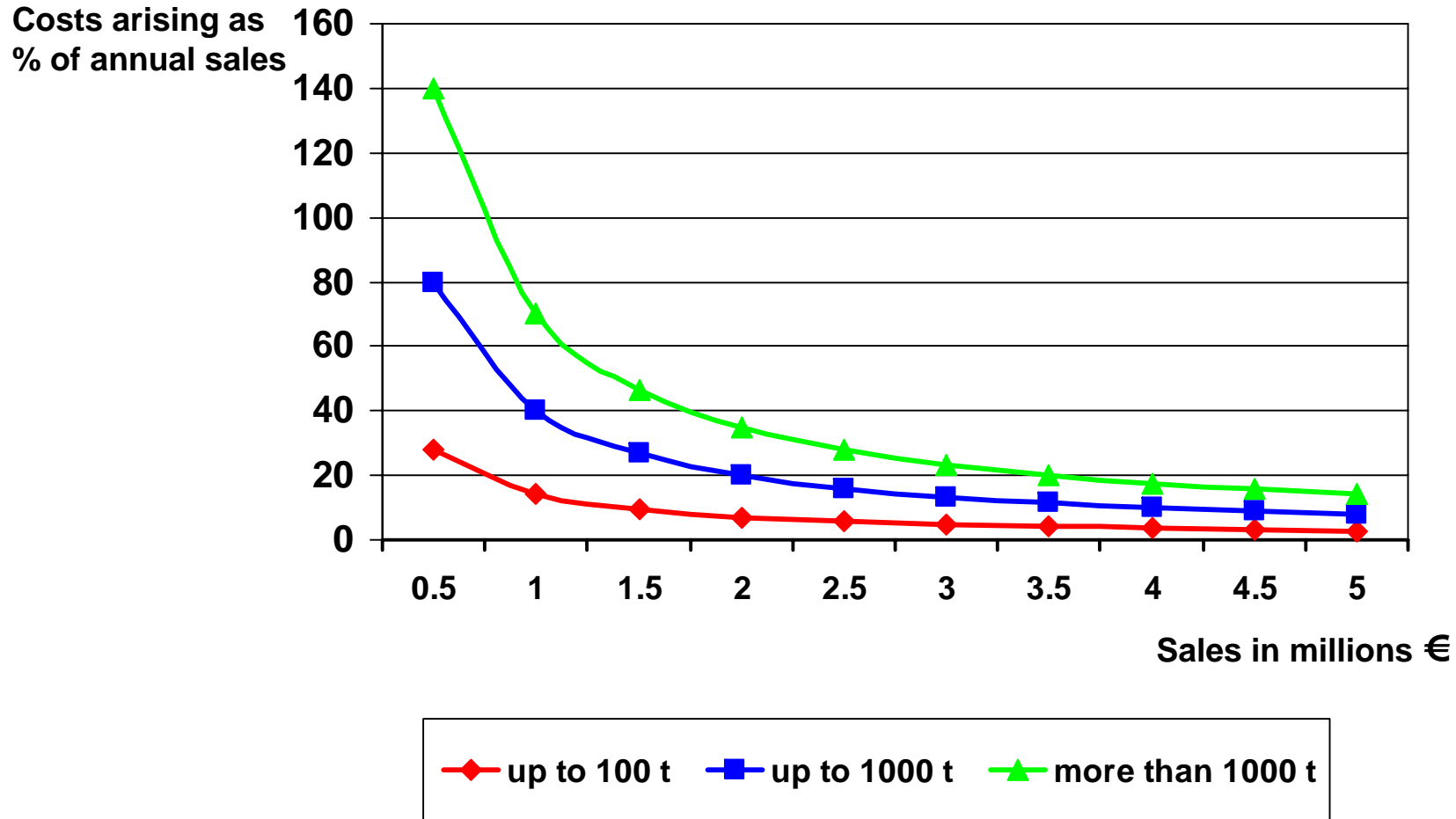
Individual substances are subject to REACH



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Costs of REACH registration as a function of sales and volume





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Costs of REACH registration of individual substances in the leather sector

Max. amount registered	Average sales	Average price per kg	Attainable sales	Registration costs	Costs as % of annual sales
10 t	5 t	5 €	0.025 million €	0.050 million €	200 %
100 t	50 t	2 €	0.10 million €	0.140 million €	140 %
1000 t	500 t	1.5 €	0.75 million €	0.400 million €	54 %
>1000 t	5000 t	1 €	5 million €	0.700 million €	14 %

The short-term capital requirements to finance the registration costs is very high

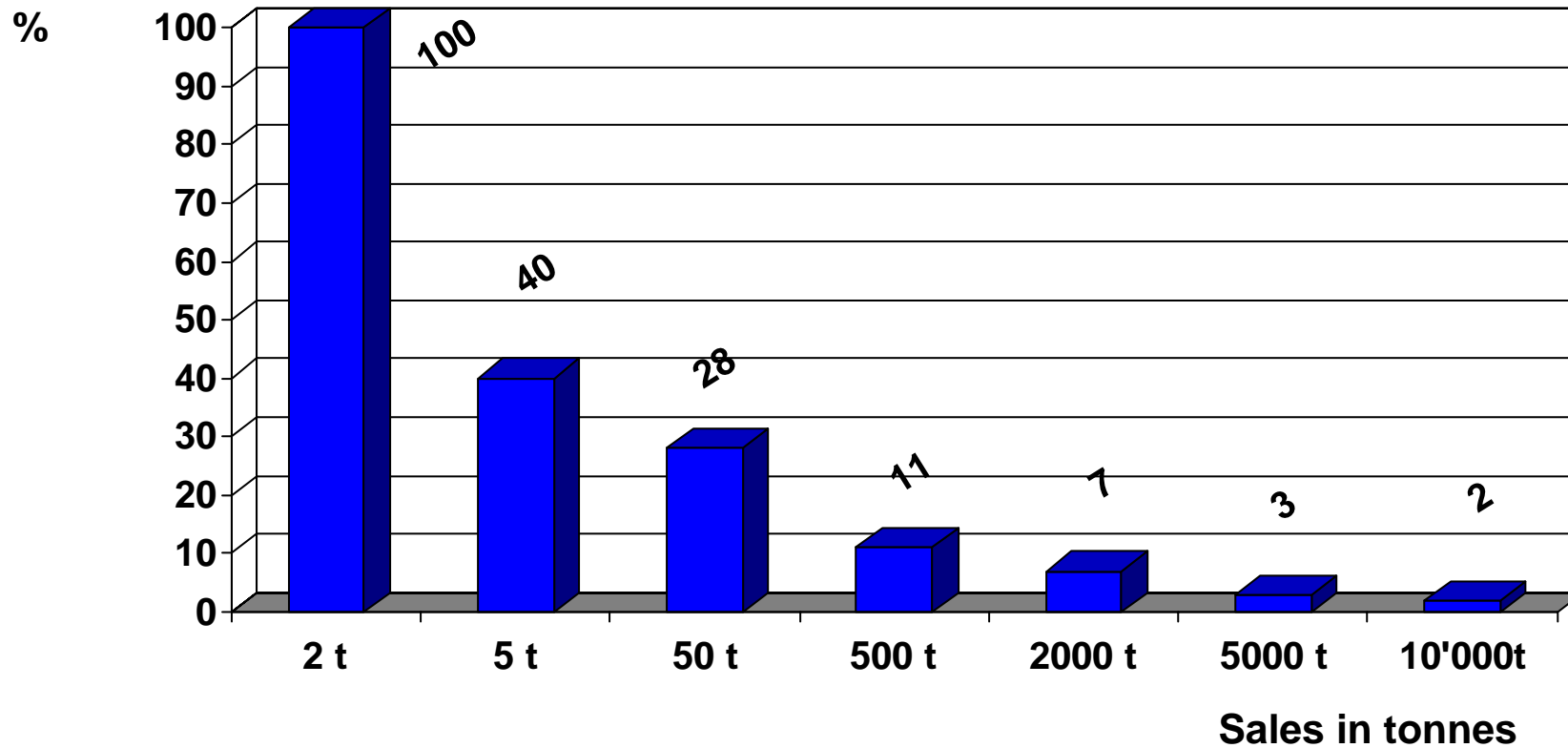
Alternative: Investment in production facilities outside Europe



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Rise in price of leather chemicals resulting from REACH
Simplified diagram, costs spread over 5 years





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Inferences for chemicals manufacturers

Chemicals registration is only worthwhile for large volume products or substances, the leather industry sector is too small

An average amount of 10 t - 600 t in the leather sector can be expected to result in price increases of 10 - 30%

Price rises cannot be enforced globally, additional price increases within the EU

Importing chemicals into the EU is not attractive because it is too expensive.

At least 30 % of the substances will disappear ⁵⁾ unless corrections to REACH can be achieved. This will impact primarily on the leather niche market



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Inferences for tanneries

The chemicals used in leather making account for some 10-20 % of the total production costs. ³⁾

An estimated 10-30% rise in chemicals prices means approximately 3-6 % less profit on the finished leather.

There is only a limited range of equivalent replacements possible for the substances no longer available. Registration and application of the new chemicals are just too expensive.

All this hinders flexibility (fashion), specialties (niche products) and new developments.

We can expect to see the manufacture of leather and leather chemicals move away from Europe.



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Summary

REACH makes excessive demands on companies, particularly small industry segments like the leather industry, because it is expensive, time-consuming and bureaucratic ⁸⁾

REACH brings no improvement in terms of environmental protection
Recycling such as local processing of skins and hides will become scarcely feasible in the EU

REACH is detrimental to innovation and competitiveness, and will cost jobs.

REACH means no improvement in health protection, the existing legislation is adequate, e.g. Directive 67/548/EEC et seq. or Commission Decision 2002/231/EC: (eco-label for footwear)

Low-wage countries with poor ecology and quality standards will take over the production of chemicals and leather, resulting in an overall negative picture as compared with the situation at present

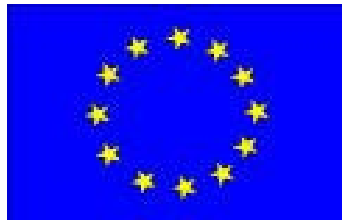
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Demands

REACH should be revised and re-drafted to take into account the following:

- 1) REACH must be so framed as to be implementable for small industry segments as well**
- 2) REACH must more strongly encourage research and development**
- 3) REACH must be applicable inside and outside the EU, and harmonised with the WTO (World Trade Organisation)**



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Sources

- 1) Fischer Weltalmanach , 2002
- 2) World statistical compendium FAO, 2003
- 3) EUEC IPPC Bureau, May 2001
- 4) Cotance (The European Leather Association)
- 5) Arthur D. Little, REACH Study
- 6) VCI (Verband der Chemischen Industrie)
- 7) VDL (Verband der Deutschen Lederindustrie)
- 8) ARGE Report, Landesregierung Nordrhein-Westfalen