


# EU Legislation on Titanium Dioxide



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# Titanium dioxide (TiO<sub>2</sub>)

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- **Titanium dioxide pigment:** white powder with high opacity and brilliant whiteness. Valuable pigment and opacifier for a broad range of applications in paints, plastic goods, inks and paper, etc.
  - **Produced by two chemical processes:** sulphate or the chlorine process
  - **Waste from production:** solid waste, strong acid waste, weak acid waste, neutralised waste, treatment waste and dust


# Titanium Dioxide legislation




## ■ 3 directives

- 78/176/EEC – waste from the titanium dioxide industry
- 82/883/EEC – on procedures to monitor the environment concerned by the waste from titanium dioxide industry
- 92/112/EEC – on procedures to harmonise the programmes for the reduction of waste caused by the TiO<sub>2</sub> industry

# Objective of Directives

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- Prevention of waste
  - Progressive reduction and eventual elimination of negative environmental impacts of waste from TiO<sub>2</sub> industry
  - Waste arising from the 2 production processes in the TiO<sub>2</sub> industry: Chlorine and sulphate process

# Water

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- MS shall prohibit the disposal of certain waste:
    - Solid and strong acid waste from both processes
    - Treatment waste from the sulphate process
  - MS shall insure that industry meets set out limit values when waste is discharged into water referring to:
    - Weak acid waste and neutralised waste from both processes and also treatment waste from chlorine process

# Air

- MS shall prohibit the emission of acid droplets from the sulphate process
- MS shall insure that each industry establishment meets set out limit values referring to: dust, SO<sub>x</sub>, chlorine



# Water + Land+ Air

- MS shall prohibit disposal of waste from the TiO<sub>2</sub> industry unless prior authorisation granted by MS concerned, subject to specific conditions
- Authorisation given for limited period only, that can be renewed



# New Industrial Establishments

New industrial establishments need prior authorisation from MS





# MS Monitoring and reporting

- MS shall monitor the compliance with the limit values
- MS shall monitor waste disposal from the TiO<sub>2</sub> industry into water, air and land according to provisions (Annex to the directive 82/883/EEC) - Mandatory and optional monitoring with a certain frequency
- MS appoint a competent authority to carry out the monitoring
- Reporting by MS to the COM every 3 years



# Simplification of the directives



- 1 simplified directive with deleted obsolete provisions
- Proposal for Commission adoption this year

# Contact details

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