

ORACAL[®] 451

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1. description of item production and manufacture

Trade name: ORACAL® 451

"Special colours available on request"

Use: self adhesive film

manufacturer

Orafol Europe GmbH

Orafolstrasse 2

D - 16515 Oranienburg

Tel.: + 49 03301 864 0 Fax.: + 49 03301 864 100

E-mail address: p.kanert@orafol.de

Emergency Telephone

Information centre for symptom of poisoning Berlin + 49 030 19 240

2. possible dangers

risk to human beings and environment: none

3. composition / information about components chemical characteristics

pvc - film polyacrylate adhesive silicone - coated paper

Dangerous contents

Do not contain hazardous substances neither substances of the "Candidate List of Substanzes of Very High Concern for authorisation" ECHA (REACH) concetration >0.1 % (w/w) (Relating: film + adhesive)

* The original components which are used in the formulation of these products form the basis of evaluation. This statement refers to the condition when leaving the factory ORAFOL Europe GmbH in Oranienburg.

This information is based on our current knowledge and practical experience. It cannot be excluded that minor traces are included in the materials due to contamination of single raw material components which cannot be avoided from the technical point of view. Routine analyses of our products concerning contents of the above-mentioned components are not carried out. For factors which are beyond our knowledge and control any guarantee and liability cannot be accepted.

The statement refers to our current production. Old stock could deviation from the assessment.



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all types

4. recommendations for first medical aid general information

after inhalation none
after contact with the skin none
after contact with the eyes none
after having swallowed up none
special information for the doctor none

5. recommendation for fire fighting

suitable fire extinguishing media

fire extinguishing media which are not suitable for safety reasons None

special danger by the material itself and from combustion products

hazardous decomposition products at flame temperature: carbon dioxide, carbon monoxide. PVC-films develop gaseous HCl at flame temperature.

special protecting equipment none additional information none

6. recomendations in case of unintentional escape

recommendations in respect of persons: none recommendations regarding environment: none recommendatin for cleaning: none additional information: none

7. handling and storage

information for use with danger

none

information regarding fire prevention and explosion

none

requirements to storage places and storage containers

none

further information

none

8. limitation of exposition and personal protective equipment supplementary information regarding construction of technical plants none



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contents regarding working place and threshold values that have to be supervised

not applicable

personal protective equipment

breathing protection not necessary
hand protection not necessary
eye protection not necessary
body protection not necessary

hygiene recommendatin as usual regarding working place

9. physical and chemical properties

phenotype

appearance solid

colour according to desired tint

odour none

data regarding security

pH-value not applicable boiling point not applicable melting or fusing point not applicable flash point not applicable flammability on solid bases not applicable flammability of gases: not applicable flammable temperature not applicable spontaneous ignition of the solid not applicable spontaneous ignition of the gas not applicable properties assisting inflammation not applicable danger of explosion not applicable limits of explosion not applicable consistency/density not applicable water solubility/fat solubility not applicable viscosity not applicable

10. stability and reactivity

conditions to be avoided not applicable substances to avoid not applicable

dangerous decomposition of products none in case of appropriate use

11. information regarding toxicology acute toxicology



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classification limit LD₅₀/LC₅₀-value

oral not determined dermatologic not determined inhalative not determined

irritating effects

to skin not applicable to eyes not applicable

sensitizing effects

look to general remarks

experience from the practical use

experience classification not applicable other experience not applicable

general remarks

Due to generally increasing allergic influences direct contact to the tacky surface should be avoided as far as possible as specific reactions to human skin cannot be execluded.

12. information regarding ecology

information regarding elemination not determined

(product life and decomposition)

environmental properties not applicable

eco-toxic reactions

aquatic effects generally speaking no danger to water

(self classification)

additional ecologic informations none

13. information regarding recycling

recommendation: waste class similar to household waste, is to be recycled according to the local regulations

14. information regarding transportation

additional information: not classified as a dangerous product in respect to transportation regulations

15. prescription / instructions



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Comply with regulation RoHS Comliance EU Directive 2011/65

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No dangerous product / composition in respect to the classification of risks EEC

No: 594/91 dated 4.3.91 is stuck to, also No: 67/548 (very toxic materials).

H phrases: none P phrases: none

National regulations: Germany

Water hazard class - no hazardous for water

16. other information

All information given in this certificate is based on our current knowledge and experience; the figures and individual information do not describe any technical data of a product and do not constitute a warranty of properties as defined by technical specifications.