

| Safety guidance on concentrations of particular chemicals in certain consumer goods | | | | | |
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| Type of consumer good | Indicative concentrations (under which there are not current safety concerns) | Chemical name and Chemicals Abstract Service (CAS) number | Potential health effects | References | Examples of types of consumer goods |
| Clothing, textiles and leather articles in direct and prolonged contact with the human skin or oral cavity. | 30 mg/kg (or 0.003 % by weight) for each of the 22 listed aromatic amines. | <ol style="list-style-type: none"> 1. 4-Aminodiphenyl (CAS 92-67-1) 2. Benzidine (CAS 92-87-5) 3. 4-Chloro-o-Toluidine (CAS 95-69-2) 4. 2-Naphthylamine (CAS 91-59-8) 5. o-Aminoazotoluene (CAS 97-56-3) 6. 2-Amino-4-Nitrotoluene (CAS 99-55-8) 7. p-Chloroaniline (CAS 106-47-8) 8. 2,4-Diaminoanisole (CAS 615-05-4) 9. 4,4'-Diaminodiphenylmethane (CAS 101-77-9) 10. 3,3'-Dichlorobenzidine (CAS 91-94-1) 11. 3,3'-Dimethoxybenzidine (CAS 119-90-4) 12. 3,3'-Dimethylbenzidine (CAS 119-93-7) 13. 3,3'-Dimethyl-4,4'diaminodiphenylmethane (CAS 838-88-0) 14. p-Cresidine (CAS 120-71-8) 15. 4,4'-Methylene-Bis(2-Chloroaniline) (CAS 101-14-4) 16. 4,4'-Oxydianiline (CAS 101-80-4) 17. 4,4'-Thiodianiline (CAS 139-65-1) 18. o-Toluidine (CAS 95-53-4) 19. 2,4-Toluylenediamine (CAS 95-80-7) 20. 2,4,5-Trimethylaniline (CAS 137-17-7) 21. o-Anisidine (CAS 90-04-0) 22. p-Aminoazobenzene (CAS 60-09-3) | <p>The aromatic amines listed are classified as either known or suspected human carcinogens.</p> <p>The critical health effects for risk characterisation include systemic long-term effects including carcinogenicity, reproductive toxicity and developmental toxicity.</p> | <p>NICNAS assessment of benzidine-based dyes health effect carcinogenicity - supply of articles likely to come into direct and prolonged contact with the human skin that may plausibly result in exposure to benzidine-based dyes at unacceptable concentrations be restricted: http://www.nicnas.gov.au/chemical-information/imap-assessments/imap-group-assessment-report?assessment_id=513</p> <p>IARC classifications Group 1 – carcinogenic to humans; and 2B – possibly carcinogenic to humans</p> <p>Monograph is available at: http://monographs.iarc.fr/ENG/Monographs/vol99/mono99.pdf</p> | <ul style="list-style-type: none"> • Clothing such as shirts, singlets, pants, jeans, shorts underwear, socks, gloves; • Bedding, such as sheets, pillow cases doona covers sleeping bags; and • Yarn and fabrics supplied to consumers where the finished article is likely to be in direct and prolonged contact with the skin. |

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| | | | | HSIS classifications - Carc. Cat. 2; R45 and Repr. Cat. 3; R63. See: http://hsis.safeworkaustralia.gov.au/HazardousSubstance/Details?hazardousSubstanceID=16 | |

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| Clothing and textiles and clothing finishes | <p>30 mg/kg (or 0.003 % by weight) for infants' clothing and clothing specifically marked for individuals with sensitive skin</p> <p>100 mg/kg (or 0.01 % by weight) for garments which contact the skin</p> <p>300 mg/kg (or 0.03 % by weight) for other garments or fabrics</p> | Formaldehyde (50-00-0) | <p>The critical health effects for characterising public health risk from exposure to formaldehyde are sensory irritation and skin sensitisation.</p> <p>There is also an increased risk of rare cancers in situations where people have prolonged, high level exposure to formaldehyde.</p> | <p>NICNAS assessment recommended that in addition to more restrictions under the Poisons Standard, cut-off values for formaldehyde content of consumer products should be considered: http://www.nicnas.gov.au/_data/assets/pdf_file/0006/4389/PEC_28_Formaldehyde_Full_Report_PDF.pdf</p> <p>IARC classification Group 1 – carcinogenic to humans.</p> <p>Monograph is available at: http://monographs.iarc.fr/ENG/Monographs/vol100F/mono100F-29.pdf</p> <p>HSIS classification is Xi; R41 R43. See: http://hsis.safeworkaustralia.gov.au/HazardousSubstance/Details?hazardousSubstanceID=6814.</p> | <ul style="list-style-type: none"> • Infant clothing such as singlets, jumpsuits, t-shirts, pants, socks; • children's and adults clothing such as nightwear, shirts, trousers; • bedding, such as sheets, blankets, pillow cases, doona covers; and • fabrics which crease easily. |

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| Leather and textiles articles, including clothing in direct contact with the human skin. | 0.1 mg/kg | 2-Butenedioic acid, (E)-, dimethyl ester (624-49-7) Synonyms: Dimethyl fumarate (DMF) Fumaric acid, dimethyl ester Fumaderm Methyl fumarate | The critical health effects for characterising public health risk from exposure to this substance is skin sensitisation. | NICNAS assessment recommended considering mechanisms to control in consumer articles to below 0.1mg/kg. http://www.nicnas.gov.au/chemical-information/imap-assessments/imap-assessment-details?assessment_id=1629 | <ul style="list-style-type: none"> • skin contact surfaces of leather sofas and couches • footwear • textile products including clothing where there is direct contact with the skin |