

Australian Standard<sup>®</sup>

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**Industrial hand cleaners  
(petroleum solvent type)**

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This Australian Standard was prepared by Committee SF/28, Hand Cleansers. It was approved on behalf of the Council of Standards Australia on 1 May 1991 and published on 10 June 1991.

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The following interests are represented on Committee SF/28:

Australian Chemical Specialties Manufacturers Association  
Australian Institute of Petroleum  
Australian Medical Association  
Bureau of Steel Manufacturers  
Chemical Confederation of Australia  
Confederation of Australian Industry  
Department of Health, Qld  
Department of Health, Tas.  
Department of Labour, Vic.  
Health Department, Vic.  
Health Department, W.A.  
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Society of Automotive Engineers  
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## PREFACE

This Standard was prepared by the Standards Australia Committee on Hand Cleansers to supersede AS 1223—1982, *Safety requirements for industrial hand cleaners (petroleum solvent type)*.

In the course of this revision, consideration was given to the inclusion of hand cleaners using citrus-based solvents as a primary ingredient. It was decided that insufficient was known about the safety of such materials and that inclusion of those types of cleaner would need to await further research.

During preparation of this Standard, reference was made to the following document:

Canadian Government Standards Board

2-GP-16Ma *Standard for cleaner, hand, waterless*

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## FOREWORD

The formulation of a hand cleaner tends to be a compromise between selection of components which keep adverse effects on the skin to an acceptable minimum, and a formulation which will perform its task sufficiently well that users will use it in preference to patently dangerous substances.

In the course of this revision of the Standard, a proposal was put forward suggesting a substantial decrease in allowable aromatic hydrocarbon content from the 10% permitted in the previous edition. It was suggested that products relying more on alternatives such as iso-paraffins could perform adequately and were safer. The Committee decided, however, that there was insufficient evidence to show that the use of permitted aromatic hydrocarbons at the present level was a noticeable health hazard and that, because they were efficacious and economic materials, their reduction could not be justified at this time.

Regardless of formulation, users should be warned that over-use of hand cleaners could cause dryness of the skin and may lead to defatting. Where the use of the hand cleaner is above normal the application of an emollient cream is recommended.

Difficulty has been experienced in the determination of aromatic hydrocarbon content using the specified ASTM test method on samples of solvent distilled from manufactured hand cleaners. It appears that contaminants carried over from other ingredients are sufficient to make results unreliable. Indications of compliance with this requirement may therefore have to be obtained from tests of ingredients prior to manufacture, as available alternative tests which might be carried out on finished products are considered to be too unwieldy or requiring test equipment not readily available to most laboratories.

## STANDARDS AUSTRALIA

**Australian Standard**  
**Industrial hand cleaners (petroleum solvent type)**

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE** This Standard specifies safety requirements for industrial hand cleaners of the petroleum solvent type which are intended for the removal of dirt, grease and other soils. It places limits on the composition and the materials which may be used, and specifies requirements for packaging and labelling.

This Standard does not include hand cleaners using citrus-based solvents as a cleansing ingredient. Cleaners having a small amount of citrus-based solvent sufficient only to provide a fragrance are, however, included in the Standard.

Appendices set out the methods for determination of solvent content, flash point, free alkali content, determination of miscibility with water and pH value, and determination of the stability of hand cleaners.

**1.2 REFERENCED DOCUMENTS** The following documents are referred to in this Standard:

AS

1792 Method of determining the biodegradability of surfactants

ASTM

D 86 Method for distillation of petroleum products

D 322 Test method for gasoline diluent in used gasoline engine oil by distillation

D 1172 Test method for pH of aqueous solutions of soaps and detergents

D 1319 Test method for hydrocarbon types in liquid petroleum products by fluorescent indicator adsorption

Worksafe Australia

Guidance note for completion of a material safety data sheet. Canberra: Worksafe Australia, 2nd edition, 1990.