

## **SLOVENSKI STANDARD** SIST EN 61434:2001

01-februar-2001

### Secondary cells and batteries containing alkaline or other non-acid electrolytes -Guide to the designation of current in alkaline secondary cell and battery standards

Secondary cells and batteries containing alkaline or other non-acid electrolytes - Guide to the designation of current in alkaline secondary cell and battery standards

Sekundärzellen und Batterien mit alkalischem oder anderen nicht säurehaltigen Elektrolyten - Richtlinien für die Bestimmung des Stromes in Normen für alkalische Sekundärzellen und Batterien (standards.iteh.ai)

Accumulateurs alcalins et autres accumulateurs à électrolyte non acide - Guide pour l'expression des courants dans les normes d'accumulateurs alcalins

Ta slovenski standard je istoveten z: EN 61434:1996

### ICS:

29.220.30 Alkalni sekundarni členi in baterije

Alkaline secondary cells and batteries

SIST EN 61434:2001

en

## iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 61434:2001 https://standards.iteh.ai/catalog/standards/sist/a272ce6a-1af3-47f7-8a99-3f8c42b0da73/sist-en-61434-2001

## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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English version

### Secondary cells and batteries containing alkaline or other non-acid electrolytes Guide to the designation of current in alkaline secondary cell and battery standards (IEC 1434:1996)

Accumulateurs alcalins et autres accumulateurs à électrolyte non acide Guide pour l'expression des courants dans les normes d'accumulateurs alcalins (CEI 1434:1996) Sekundärzellen und Batterien mit alkalischem oder anderen nicht säurehaltigen Elektrolyten - Richtlinien für die Bestimmung des Stromes in Normen für alkalische Sekundärzellen und Batterien (IEC 1434:1996)

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European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

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#### Foreword

The text of document 21A/188/FDIS, future edition 1 of IEC 1434, prepared by SC 21A, Alkaline secondary cells and batteries, of IEC TC 21, Secondary cells and batteries, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61434 on 1996-10-01.

The following dates were fixed:

-	latest date by which the EN has to be implemented at national level by publication of an identical		
	national standard or by endorsement	(dop)	1997-07-01
-	latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	1997-07-01

#### **Endorsement notice**

The text of the International Standard IEC 1434:1996 was approved by CENELEC as a European Standard without any modification.

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# NORME **INTERNATIONALE** INTERNATIONAL **STANDARD**

CEI **IEC** 1434

Première édition First edition 1996-09

Accumulateurs alcalins et autres accumulateurs à électrolyte non acide -Guide pour l'expression des courants dans les normes d'accumulateurs

# alcalins iTeh STANDARD PREVIEW

# (standards.iteh.ai) Secondary cells and batteries containing

alkaline or other non-acid electrolytes https://standard Guide to the designation of current in alkaline secondary cell and battery standards

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### SECONDARY CELLS AND BATTERIES CONTAINING ALKALINE OR OTHER NON-ACID ELECTROLYTES –

# Guide to the designation of current in alkaline secondary cell and battery standards

#### FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

This International Standard IEC 1434 has been prepared by subcommittee 21A: Secondary cells and batteries containing alkaline or other non-acid electrolytes, of IEC technical committee 21: Secondary cells and batteries.

The text of this standard is based on the following documents:

FDIS	Report on voting
21A/188/FDIS	21A/199/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

#### INTRODUCTION

In alkaline secondary cell and battery standards and in the industry in general, charge and discharge currents have traditionally been expressed as fractions or multiples of C, where C is the rated capacity of the cell or battery in ampere hours (Ah). Objections have been raised that to divide or multiply C results in a fraction or multiple of Ah and it is therefore mathematically incorrect to express current (amperes (A)) in this way.

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### SECONDARY CELLS AND BATTERIES CONTAINING ALKALINE OR OTHER NON-ACID ELECTROLYTES –

# Guide to the designation of current in alkaline secondary cell and battery standards

#### 1 Scope

This International Standard applies to secondary cells and batteries containing alkaline or other non-acid electrolytes. It proposes a mathematically correct method of current designation which shall be used in future secondary cell and battery standards.

#### 2 Method of designation

The reference test current as specified in the various test methods detailed in a standard shall be expressed as:

$$I_{\rm t} A = \frac{C_{\rm n}Ah}{1\,\rm h}$$

where

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*I*t is the reference test current, in amperes;

 $C_n$  is the rated capacity of the cell or battery as declared by the manufacturer, in ampere-hours; https://standards.iteh.av/catalog/standards/sist/a2/2ce6a-1at3-4/17-8a99-

3f8c42b0da73/sist-en-61434-2001

*n* is the time base (hours) for which the rated capacity is declared.

All charge and discharge currents shall then be expressed as fractions or multiples of  $I_{t}$ .

The value of *n* used in the standard determines only the fraction or multiple of  $I_t$  used for the various specified purposes in that standard. For example, if n = 5, then the discharge current used to verify the rated capacity shall be 0,2  $I_tA$ . If n = 1, the discharge current used to verify the rated capacity shall be 1,0  $I_tA$ .

Note that the value of *n* used in the standard has no effect on the value of  $I_t$ . The numerical value of  $I_t$  will always be equal to the numerical value of  $C_n$  regardless of the value of *n*.