DIN EN 1409:2023-12 (E)

Chemicals used for water treatment intended for human consumption - Polyamines

Contents

Page

European foreword 4

Introduction 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 6

4 Description 6
4.1 Identification 6
4.1.1 Chemical name(s) 6
4.1.2 Synonym(s) or common name(s) 6
4.1.3 Relative molecular mass 6
4.1.4 Empirical formula 6
4.1.5 Chemical formula 7
4.1.6 CAS Registry Numbers 7
4.1.7 EINECS reference 7
4.2 Commercial form 8

5 Physical properties 8
5.1 Appearance 8
5.2 Density 8
5.3 Solubility 8
5.4 Vapour pressure 8
5.5 Boiling point at 100 kPa 8
5.6 Freezing point 8
5.7 Specific heat 8
5.8 Viscosity dynamic 8
5.9 Critical temperature 8
5.10 Critical pressure 8
5.11 Physical hardness 8

6 Chemical properties 9
6.1 General 9
6.2 Purity criteria 9
6.2.1 General 9
6.2.2 Impurities and main by-products 9
6.3 Composition of commercial product 9
6.4 Chemical parameters 10

7 Test methods 10
7.1 Sampling 10
7.1.1 General 10
7.1.2 Sampling from drums and bottles 10
7.2 Analyses 11
7.2.1 General 11
7.2.2 Main product 11
7.2.3 Impurities 13

8 Labelling - transportation - storage 20

8.1 Means of delivery 20
8.2 Labelling according to the EU Legislation 20
8.3 Transportation regulations and labelling 21
8.4 Marking 21
8.5 Storage 21
8.5.1 Long term stability 21
8.5.2 Storage incompatibilities 21

Annex A (informative) General information on polyamines 22

A.1 Origin 22
A.1.1 Raw materials 22
A.1.2 Manufacturing process 22
A.2 Use 22
A.2.1 Function 22
A.2.2 Form in which it is used 22
A.2.3 Treatment dose 22
A.2.4 Means of application 22
A.2.5 Secondary effects 22
A.2.6 Removal of excess product 22
A.3 Rules for safe handling and use 23
A.4 Emergency procedures 23
A.4.1 First aid 23
A.4.2 Spillage 23
A.4.3 Fire 23

Bibliography 24