DIN EN 1396:2015-06 (E)

Aluminium and aluminium alloys - Coil coated sheet and strip for general applications - Specifications

Contents

Page

Foreword 4

Introduction 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 7

4 Technical conditions for inspection and delivery 9
4.1 Ordering information 9
4.2 Requirements 11
4.2.1 Production and manufacturing processes 11
4.2.2 Quality control 11
4.2.3 Freedom from defects 11
4.2.4 Chemical composition 11
4.2.5 Mechanical properties 11
4.2.6 Tolerances on shape and dimensions 11
4.2.7 Coating properties 12
4.3 Test procedures 12
4.3.1 Chemical composition 12
4.3.2 Tensile test 12
4.3.3 Coating tests 12
4.3.4 Retests 13

5 Mechanical properties 13

6 Organic coating properties 15
6.1 Tolerances on thickness 15
6.2 Tolerances on gloss 16
6.3 Tolerances on colour 17

7 Inspection documents 17

8 Marking 17

9 Packing 17

10 Arbitration tests 18

Annex A (normative) Rules for rounding 19

Annex B (informative) Examples of coating systems 20

Annex C (informative) Guidelines for organic coatings 22

C.1 General 22
C.2 Colour 22
C.3 Flexibility 22
C.4 Adhesion 23

C.5 Pencil hardness 24
C.6 Durability of the organic coating 24
C.6.1 General 24
C.6.2 Corrosion resistance (outdoor exposure) 26
C.6.3 UV resistance 26
C.6.3.1 General 26
C.6.3.2 Natural outdoor UV radiation resistance tests 27
C.6.3.3 UV radiation resistance (accelerated test) 28
C.6.4 Humidity resistance (accelerated test) 28
C.6.5 Acetic acid salt spray fog resistance (accelerated corrosion test) 28
C.6.6 Filiform corrosion test, FFC (accelerated corrosion test) 28

Annex D (informative) Guidelines for storage and subsequent processing 30

D.1 Storage 30
D.2 General instructions for processing 30
D.3 Forming 30
D.4 Cutting 30
D.5 Joining 31
D.6 Cleaning 31
D.7 Temporary protective films 31

Bibliography 32