DIN SPEC 91446:2021-12 (E)

Classification of recycled plastics by Data Quality Levels for use and (digital) trading; Text in English

Contents

Page

Foreword 4

Introduction 6

1 Scope 7

2 Normative references 7

3 Terms and definitions 7

4 Symbols and abbreviations 12

5 Data Quality Levels (DQL) for recyclates 12
5.1 General 12
5.2 Introduction of the Data Quality Levels (DQL) 13
5.3 Application-specific DQL 13
5.4 Further explanation for optional characteristics 14
5.4.1 Filler content 14
5.4.2 Content of contaminants in the plastic waste feedstock for recycling 14
5.4.3 Additives 14
5.4.4 Further details recycling process 14
5.4.5 Traceability 14
5.4.6 Recyclability 14
5.4.7 CO_2 equivalents 14
5.5 Sampling and sample preparation 14
5.5.1 General 14
5.5.2 Minimum requirements for sampling and sample preparation 15
5.6 Determination of the property tolerances 15

6 Identification of recycled content 15
6.1 Labelling 15
6.2 Determination of recycled content 17
6.3 Technical documentation: Product Data Sheet (PDS) 20

Annex A (normative) Requirements for the individual DQLs 22

Annex B (informative) Examples for technical documentation (PDS) 25
B.1 Example for a Product Data Sheet (DQL: 1) 25
B.2 Example for a Product Data Sheet (DQL: 2) 25
B.3 Example for a Product Data Sheet (DQL: 3) 26
B.4 Example for a Product Data Sheet (DQL: 4), incl. optional characteristics 28
B.5 Example for further information to provide 30

Annex C (informative) Guidance for the characterization of plastic waste as feedstock for plastics recycling 31
C.1 Recommended characteristics of plastic waste feedstock for recycling 31
C.2 Additional characteristics of plastic waste feedstock for recycling 31
C.3 Sampling for the determination of properties of plastic waste as feedstock for recycling 32

Bibliography 34

Figures

Figure 1 — Illustration of terms (based on a figure drafted by IKK) 8

Figure 2 — Label 16

Tables

Table 1 — DQLs per required information, properties and optional characteristics 13

Table 2 — Label description 17

Table 3 — Calculation table for example 1 18

Table 4 — Calculation table for example 2 18

Table 5 — Calculation table for example 3 19

Table 6 — Calculation table for example 4 20

Table 7 — Calculation table for example 5 20

Table 8 — Material status information (optional) 21

Table A.1 — Information (I) 22

Table A.2 — Properties (P) 23

Table A.3 — Optional characteristics (O) 23

Table B.1 — Material status 25

Table B.2 — Material status 26

Table B.3 — Typical properties 26

Table B.4 — Material status 27

Table B.5 — Typical properties 27

Table B.6 — Material status 28

Table B.7 — Typical properties 29

Table C.1 — Waste Characterization Sheet 32