

DIN EN 13683:2011-07 (E)

Garden equipment - Integrally powered shredders/chippers - Safety (includes Amendment A2:2011)

Contents		Page
Foreword		4
0	Introduction	5
1	Scope	6
2	Normative references	6
3	Terms and definitions	7
4	List of significant hazards	11
5	Safety requirements and/or measures	13
5.1	General	13
5.2	Access to power driven components	13
5.2.1	Feed safety openings	13
5.2.2	Discharge chutes	22
5.2.3	Guards	26
5.2.4	Power driven components except cutting means	26
5.3	Hot exhaust surfaces	27
5.3.1	General	27
5.3.2	Test equipment and method of test	27
5.3.3	Test acceptance	27
5.4	Controls	29
5.4.1	Location	29
5.4.2	Stopping and starting the power source	29
5.4.3	Identification of controls	29
5.5	Protection from exhaust fumes	29
5.6	Electrical requirements	29
5.6.1	General	29
5.6.2	Low voltage battery circuits (not including magneto grounding circuits)	29
5.6.3	Overload protection	30
5.6.4	Terminals and uninsulated electrical parts	30
5.7	Liquid spillage	30
5.8	Transport	30
5.9	Verification of safety requirements	30
5.9.1	Test conditions	30
5.9.2	Thrown object test (see 5.2.3.1)	31
5.9.3	Stability	34
5.9.4	Dynamic stability test	34
5.10	Noise	35
5.10.1	Noise reduction as a safety requirement	35
5.10.2	Verification of requirements on noise - Noise measurement	35
6	Information for use	36
6.1	Instruction for use	36
6.2	Marking	37
6.2.1	Minimum marking	37
6.2.2	Warning marking	38
6.2.3	Marking durability	38
6.2.4	Test	38

Annex A (informative) #Examples of inlet openings where the safety distance is 200 mm (see 5.2.1.3)\$	39
Annex B (normative) Test enclosure	42
Annex C (normative) Target panels - Specification for corrugated fibreboard (see 5.9.2)	44
C.1 Corrugated fibreboard target panel composition	44
C.2 Corrugated fibreboard penetration test	44
C.2.1 General	44
C.2.2 Test fixture	44
C.2.3 Corrugated fibreboard samples	44
C.2.4 Procedure	44
C.2.5 Acceptance criteria	45
Annex D (informative) Safety instructions	47
D.1 General	47
D.2 Safe operating practices	47
D.2.1 Training	47
D.2.2 Preparation	47
D.2.3 Operation	48
D.2.4 Maintenance and storage	49
D.2.5 Additional safety instructions for units with bagging attachments	49
Annex E (normative) Symbols and/or pictograms	50
E.1 General	50
E.2 Pictograms	50
Annex F (normative) Noise test code - Engineering method (grade 2)	52
F.1 Scope	52
F.2 A-weighted sound power level determination	52
F.3 A-weighted emission sound pressure level measurement	53
F.4 Requirements for test floor	57
F.4.1 Artificial surface	57
F.4.2 Natural grass	57
F.5 Installation, mounting and operating conditions	57
F.6 Measurement uncertainties and declaration of noise emission values	58
F.7 Information to be recorded and reported	58
Annex G (informative) Example of a material and construction fulfilling the requirements for an artificial surface	59
G.1 Material	59
G.2 Construction	59
Annex ZA (informative) #Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC\$	61
Bibliography	62