



The Toro Company

UN 38.3 Lithium Ion Battery Test Summary

Cell, Battery or Product Model Number

Item number: Toro 144-0250

Item description: BATTERY-LI ION, 60V 42.5 AH [2346 Wh]

Cell, battery or product manufacturer's contact information

Name: The Toro Company

Address: 8111 Lyndale Avenue South

City: Bloomington **State:** Minnesota **ZIP:** 55420-1196 **Country:** USA

Telephone: (952) 888-8801

Email: HealthandSafety@toro.com

Website: https://www.toro.com/

Test Laboratory

Name: SGS North America

Address: 620 Old Peachtree Road, Suite 100

City: Suwanee **State:** Georgia

ZIP: 30024

Country: USA

Cell or Battery Description

Cell or Battery: 60 V / 42.5 Ah **Nominal voltage:** 55.2

Cell or Battery Type: Lithium Ion

Watt-hour Rating or Lithium Content: 2346 Wh

Complete Cell or Battery Weight: 13700 g

Unique Test Report ID Number: 4698394

Date of Test Report: 02/12/2021

Physical Description: Black plastic cover 135 cells with 15 series / 9 parallel

Finished Assembly: W: 445 mm H: 89 mm L: 361 mm

List of Tests Completed

YES	NO		Pass	Fail	Additional comments (or indicate compliance with other stds.)
X		Test T.1: Altitude simulation	X		38.3.4.1 T1
X		Test T.2: Thermal test	X		38.3.4.2 T2
X		Test T.3: Vibration	X		38.3.4.3 T3
X		Test T.4: Shock	X		38.3.4.4 T4
X		Test T.5: External short circuit	X		38.3.4.5 T5
	X	Test T.6: Impact/ Crush			N/A (cell level)
	X	Test T.7: Overcharge			N/A*
	X	Test T.8: Forced discharge			N/A (cell level)
Revision level and Amendments of UN Manual:					UN Manual Test and Criteria, Revision 7

*T7: Exempt per UN 38.3.3(d) – Overcharge Protection provided by the Toro equipment into which the battery is installed

Signature with name and title of signatory as an indication of the validity of information provided:

Rolfe Otterness, Principal Standards Engineer, The Toro Company

Date: February 13, 2021