

# Apple Product Information Sheet

The products referenced herein are "articles" and "consumer products" and therefore are excepted from the 29 CFR 1910.1200 Hazard Communication requirements. The European Classification and Labelling Regulation (EC) No 1272/2008 (CLP) and the Globally Harmonized System (GHS) of Classification and Labelling of Chemicals exempt articles from the Safety Data Sheet requirements. This Product Information Sheet is provided only as a service to our customers and is not based upon any requirement or regulation.

## **Product:** (Li-ion) ("Product")

Lithium ion single cell batteries  $\leq 20\text{Wh}$  and Lithium ion multi-cell batteries  $\leq 100\text{Wh}$

*(For purpose of transport regulations, a single cell battery is considered a "cell" and a multi cell battery is considered a "battery" for classification purposes)*

**Models:** See specific products listed in this document under Apple Product Battery Information, manufactured after January 1, 2010.

**Edition Date:** September 10, 2019

**Version:** 19.07

## **GENERAL SAFETY**

This product, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. The mixture is encapsulated in the product. Only if released due to use or processing of the product in a manner not in accordance with the product's directions for use may it present potential health and safety hazards.

## **FIRST AID**

**Ingestion:** Ingestion of a Li-ion battery is highly unlikely in the workplace, as the contents of a Li-ion battery are mostly solid, and any free liquid (ester-based electrolyte) that might drip out of a damaged battery is limited to a few drops. However, care should be taken not to touch fingers to mouth while handling a damaged battery so as to avoid any ingestion of contents. Do not induce vomiting. Wash out mouth with water. Get medical attention following potential exposure or if feeling unwell.

**Inhalation:** Remove individual to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if individual is feeling unwell.

**Skin contact:** Flush contaminated skin with plenty of water. Remove contaminated clothing. Continue to rinse for at least 15 minutes. Get medical attention. Wash clothing before reuse.

**Eye Contact:** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists.

## **HANDLING & STORAGE**

**Handling** – Do not expose product to excessive physical shock or vibration. Do not disassemble. Should an individual battery in the product become ruptured, do not allow contact with water.

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**Storage** – Store in a cool, well ventilated area. Storage above 100 degrees can result in loss of product performance, leakage, or rust. Do not expose product to open flame.

## **FIRE SAFETY**

In case of fire where products are stored, flood the area with water as needed to control the fire on nearby ordinary combustibles. If any products are involved, water may not extinguish them, but will cool the adjacent products and control the spread of fire. Fire fighters should wear self-contained breathing apparatus. To control/stop a thermal battery event where only the product is involved, use plentiful amounts of clean/dry sand to immediately smother the thermal reaction and reducing smoke. This is most effective, if applied to cover the battery, especially in the first few seconds of the event. CO<sub>2</sub>, dry chemical, and foam extinguishers may also be used for small fires in areas where products are stored, but may not extinguish the involved products themselves. LITH-X (powdered graphite) or copper powder fire extinguishers, dry ground dolomite or soda ash may also be used (these materials also act as smothering agents).

## **DISPOSAL**

Apple products contain recyclable materials and should not be put into the municipal waste stream. Refer to the following websites for battery replacement and recycling options (<http://www.apple.com/batteries/replacements.html>, <http://www.apple.com/recycling/>). Do not dispose of in fire.

## **TRANSPORTATION**

Apple's product batteries have been successfully tested and comply with the UN Manual of Test and Criteria, Part III, subsection 38.3, Revision 3, Amendment 1 or any subsequent revision and amendment. Product batteries have been manufactured under a quality management program as specified in 2.9.4 of the UN Model Regulations.

PERFORMED TESTS		RESULTS	
38.3.4.1	T1	Altitude Simulation	Pass
38.3.4.2	T2	Thermal Test	Pass
38.3.4.3	T3	Vibration	Pass
38.3.4.4	T4	Shock	Pass
38.3.4.5	T5	External Short Circuit	Pass
38.3.4.6	T6	Impact / Crush	Pass*
38.3.4.7	T7	Overcharge	Pass
38.3.4.8	T8	Forced Discharge	Pass*

*\* Applicable to cells only*

Apple product cells are rated at 20 Watt-hours or less and batteries are rated at 100 Watt-hours or less. Apple products meet the requirements for transportation under:

- UN Model Regulations Special Provisions 188 and 230
- International Civil Aviation Organization (ICAO) Technical Instructions and the International Air Transport Association (IATA) Dangerous Goods Regulations Packing Instructions:
  - 965 Section IB or Section II (UN3480, Lithium ion batteries)
    - These batteries will be offered for transport at a state of charge (SOC) not exceeding 30% of their rated design capacity.

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- 966 Section II (UN3481, Lithium ion batteries packed with equipment)
- 967 Section II (UN3481, Lithium ion batteries contained in equipment)
- International Maritime Organization (IMO) Special Provisions 188 and 230
- European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR) Special Provisions 188 and 230
- U.S. Department of Transportation (DOT) 49 CFR 173.185 and 173.185(c)
- Canadian Transport of Dangerous Goods Regulations (TDGR) Special Provision 34

The following table provides Apple Product Battery Information:

Single cell batteries ≤ 20Wh						
Model Numbers	Announce	Type	Battery(s) per Product	Battery Weight (kg)	Wh Rating	Classification (Air)
A1289	2010	MacPro	1	0.090	9	UN 3481 PI 967
A1289	2012	MacPro	1	0.090	9	UN 3481 PI 967
A1332	2010	iPhone 4	1	0.025	5.25	UN 3481 PI 967
A1332	2011	iPhone 4	1	0.025	5.25	UN 3481 PI 967
A1349	2010	iPhone 4 (CDMA)	1	0.025	5.25	UN 3481 PI 967
A1349	2011	iPhone 4 (CDMA)	1	0.025	5.25	UN 3481 PI 967
A1366	2010	iPod nano 6th gen	1	0.003	0.389	UN 3481 PI 967
A1367	2010	iPod touch 4th gen	1	0.020	3.441	UN 3481 PI 967
A1373	2010	iPod shuffle 4th gen	1	0.002	0.192	UN 3481 PI 967
A1373	2014	iPod shuffle 4th gen	1	0.002	0.192	UN 3481 PI 967
A1387	2011	iPhone 4s	1	0.026	3.441	UN 3481 PI 967
A1418	2015	iMac 21.5-inch w/ (A1644) Apple Magic Keyboard and (A1657) Magic Mouse 2	- 1 1	- 0.016 0.042	- 2.98 7.07	UN 3481 PI 967
A1418	2017	iMac 21.5-inch w/ (A1644) Apple Magic Keyboard and (A1657) Magic Mouse 2	- 1 1	- 0.016 0.042	- 2.98 7.07	UN 3481 PI 967
A1418	2017	iMac 21.5-inch w/ (A1644) Apple Magic Keyboard and (A1535) Magic Trackpad 2	- 1 1	- 0.016 0.037	- 2.98 7.73	UN 3481 PI 967
A1418	2017	iMac 21.5-inch w/ (A1843) Magic Keyboard w/Numeric Keypad and (A1657) Magic Mouse 2	- 1 1	- 0.016 0.042	- 2.98 7.07	UN 3481 PI 967
A1418	2017	iMac 21.5-inch w/ (A1843) Magic Keyboard w/Numeric Keypad and (A1535) Magic Trackpad 2	- 1 1	- 0.016 0.037	- 2.98 7.73	UN 3481 PI 967
A1418	2017	iMac 21.5-inch w/ (A1644) Apple Magic Keyboard, (A1657) Magic Mouse 2 and (A1535) Magic Trackpad 2	- 1 1 1	- 0.016 0.042 0.037	- 2.98 7.07 7.73	UN 3481 PI 967
A1418	2017	iMac 21.5-inch w/ (A1843) Magic Keyboard w/Numeric Keypad, (A1657) Magic Mouse 2 and (A1535) Magic Trackpad 2	- 1 1 1	- 0.016 0.042 0.037	- 2.98 7.07 7.73	UN 3481 PI 967
A1418	2017	iMac 21.5-inch with Retina 4K display w/ (A1644) Apple Magic Keyboard and (A1657) Magic Mouse 2	- 1 1	- 0.016 0.042	- 2.98 7.07	UN 3481 PI 967
A1418	2017	iMac 21.5-inch with Retina 4K display w/ (A1644) Apple Magic Keyboard and (A1535) Magic Trackpad 2	- 1 1	- 0.016 0.037	- 2.98 7.73	UN 3481 PI 967
A1418	2017	iMac 21.5-inch with Retina 4K display w/ (A1843) Magic Keyboard w/Numeric Keypad and (A1657) Magic Mouse 2	- 1 1	- 0.016 0.042	- 2.98 7.07	UN 3481 PI 967

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Single cell batteries ≤ 20Wh						
Model Numbers	Announce	Type	Battery(s) per Product	Battery Weight (kg)	Wh Rating	Classification (Air)
A1418	2017	iMac 21.5-inch with Retina 4K display w/ (A1843) Magic Keyboard w/Numeric Keypad and (A1535) Magic Trackpad 2	- 1 1	- 0.016 0.037	- 2.98 7.73	UN 3481 PI 967
A1418	2017	iMac 21.5-inch with Retina 4K display w/ (A1644) Apple Magic Keyboard, (A1657) Magic Mouse 2 and (A1535) Magic Trackpad 2	- 1 1 1	- 0.016 0.042 0.037	- 2.98 7.07 7.73	UN 3481 PI 967
A1418	2017	iMac 21.5-inch with Retina 4K display w/ (A1843) Magic Keyboard w/Numeric Keypad, (A1657) Magic Mouse 2 and (A1535) Magic Trackpad 2	- 1 1 1	- 0.016 0.042 0.037	- 2.98 7.07 7.73	UN 3481 PI 967
A1419	2015	iMac 27-inch w/ (A1644) Apple Magic Keyboard and (A1657) Magic Mouse 2	- 1 1	- 0.016 0.042	- 2.98 7.07	UN 3481 PI 967
A1419	2017	iMac 27-inch with Retina 5K display w/ (A1644) Apple Magic Keyboard and (A1657) Magic Mouse 2	- 1 1	- 0.016 0.042	- 2.98 7.07	UN 3481 PI 967
A1419	2017	iMac 27-inch with Retina 5K display w/ (A1644) Apple Magic Keyboard and (A1535) Magic Trackpad 2	- 1 1	- 0.016 0.037	- 2.98 7.73	UN 3481 PI 967
A1419	2017	iMac 27-inch with Retina 5K display w/ (A1843) Magic Keyboard w/Numeric Keypad and (A1657) Magic Mouse 2	- 1 1	- 0.016 0.042	- 2.98 7.07	UN 3481 PI 967
A1419	2017	iMac 27-inch with Retina 5K display w/ (A1843) Magic Keyboard w/Numeric Keypad and (A1535) Magic Trackpad 2	- 1 1	- 0.016 0.037	- 2.98 7.73	UN 3481 PI 967
A1419	2017	iMac 27-inch with Retina 5K display w/ (A1644) Apple Magic Keyboard, (A1657) Magic Mouse 2 and (A1535) Magic Trackpad 2	- 1 1 1	- 0.016 0.042 0.037	- 2.98 7.07 7.73	UN 3481 PI 967
A1419	2017	iMac 27-inch with Retina 5K display w/ (A1843) Magic Keyboard w/Numeric Keypad, (A1657) Magic Mouse 2 and (A1535) Magic Trackpad 2	- 1 1 1	- 0.016 0.042 0.037	- 2.98 7.07 7.73	UN 3481 PI 967
A1421	2012	iPod touch 5th gen	1	0.021	3.8	UN 3481 PI 967
A1421	2014	iPod touch 5th gen	1	0.021	3.8	UN 3481 PI 967
A1428	2012	iPhone 5	1	0.025	5.45	UN 3481 PI 967
A1429	2012	iPhone 5	1	0.026	5.45	UN 3481 PI 967
A1432	2012	iPad mini Wi-Fi only 1st gen	1	0.094	16.5	UN 3481 PI 967
A1446	2012	iPod nano 7th gen	1	0.007	0.8	UN 3481 PI 967
A1453	2013	iPhone 5s	1	0.026	5.92	UN 3481 PI 967
A1454	2012	iPad mini Wi-Fi + Cellular 1st gen	1	0.094	16.5	UN 3481 PI 967
A1455	2012	iPad mini Wi-Fi + Cellular (CDMA only) 1st gen	1	0.094	16.5	UN 3481 PI 967
A1456	2013	iPhone 5c	1	0.026	5.73	UN 3481 PI 967
A1456	2014	iPhone 5c	1	0.026	5.73	UN 3481 PI 967
A1457	2013	iPhone 5s	1	0.026	5.92	UN 3481 PI 967
A1507	2013	iPhone 5c	1	0.026	5.73	UN 3481 PI 967
A1507	2014	iPhone 5c	1	0.026	5.73	UN 3481 PI 967
A1509	2013	iPod touch 5th gen	1	0.021	3.8	UN 3481 PI 967
A1513	2015	Siri Remote	1	0.009	1.56	UN 3481 PI 967
A1516	2013	iPhone 5c	1	0.026	5.73	UN 3481 PI 967
A1516	2014	iPhone 5c	1	0.026	5.73	UN 3481 PI 967
A1518	2013	iPhone 5s	1	0.026	5.92	UN 3481 PI 967
A1522	2014	iPhone 6 Plus	1	0.046	11.28	UN 3481 PI 967

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Single cell batteries ≤ 20Wh						
Model Numbers	Announce	Type	Battery(s) per Product	Battery Weight (kg)	Wh Rating	Classification (Air)
A1523	2016	AirPod (right)	1	0.002	0.95	UN 3481 PI 967
A1524	2014	iPhone 6 Plus	1	0.046	11.28	UN 3481 PI 967
A1526	2013	iPhone 5c	1	0.026	5.73	UN 3481 PI 967
A1526	2014	iPhone 5c	1	0.026	5.73	UN 3481 PI 967
A1528	2013	iPhone 5s	1	0.026	5.92	UN 3481 PI 967
A1529	2013	iPhone 5c	1	0.026	5.73	UN 3481 PI 967
A1529	2014	iPhone 5c	1	0.026	5.73	UN 3481 PI 967
A1530	2013	iPhone 5s	1	0.026	5.92	UN 3481 PI 967
A1532	2013	iPhone 5c	1	0.026	5.73	UN 3481 PI 967
A1532	2014	iPhone 5c	1	0.026	5.73	UN 3481 PI 967
A1533	2013	iPhone 5s	1	0.026	5.92	UN 3481 PI 967
A1535	2015	Magic Trackpad 2	1	0.037	7.73	UN 3481 PI 967
A1535	2018	Magic Trackpad 2	1	0.037	7.73	UN 3481 PI 967
A1538	2015	iPad mini 4 Wi-Fi only	1	0.090	19.32	UN 3481 PI 967
A1549	2014	iPhone 6	1	0.028	6.91	UN 3481 PI 967
A1550	2015	iPad mini 4 Wi-Fi + Cellular	1	0.090	19.32	UN 3481 PI 967
A1553	2015	Apple Watch 1st gen 38mm	1	0.005	0.93	UN 3481 PI 967
A1554	2015	Apple Watch 1st gen 42mm	1	0.005	0.93	UN 3481 PI 967
A1574	2015	iPod touch 6th gen	1	0.019	4.02	UN 3481 PI 967
A1585	2015	iPhone Smart Battery Case	1	0.036	7.13	UN 3480 PI 965
A1586	2014	iPhone 6	1	0.028	6.91	UN 3481 PI 967
A1589	2014	iPhone 6	1	0.028	6.91	UN 3481 PI 967
A1593	2014	iPhone 6 Plus	1	0.046	11.28	UN 3481 PI 967
A1660	2017	iPhone 7 Plus Product Red Special Edition	1	0.029	7.45	UN 3481 PI 967
A1661	2017	iPhone 7 Plus Product Red Special Edition	1	0.039	11.10	UN 3481 PI 967
A1602	2016	Airpod Charging Case	1	0.009	1.52	UN 3480 PI 965
A1602	2016	AirPods in Charging Case	1	0.009	1.52	UN 3481 PI 967
A1722			1	0.002	0.95	
A1523			1	0.002	0.95	
A1602	2019	AirPods in Charging Case	1	0.009	1.52	UN 3481 PI 967
A2031			1	0.002	0.95	
A2032			1	0.002	0.95	
A1603	2015	Apple Pencil	1	0.004	0.332	UN 3481 PI 967
A1625	2015	AppleTV 4th gen w/ (A1513) Siri Remote	- 1	- 0.009	- 1.56	UN 3481 PI 967
A1633	2015	iPhone 6s	1	0.025	6.39	UN 3481 PI 967
A1634	2015	iPhone 6s Plus	1	0.041	10.61	UN 3481 PI 967
A1644	2015	Apple Magic Keyboard	1	0.016	2.98	UN 3481 PI 967
A1657	2015	Magic Mouse 2	1	0.042	7.07	UN 3481 PI 967
A1657	2018	Magic Mouse 2	1	0.042	7.07	UN 3481 PI 967
A1660 (CN)	2016	iPhone 7	1	0.029	7.45	UN 3481 PI 967
A1660	2017	iPhone 7	1	0.029	7.45	UN 3481 PI 967

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Single cell batteries ≤ 20Wh						
Model Numbers	Announce	Type	Battery(s) per Product	Battery Weight (kg)	Wh Rating	Classification (Air)
A1661	2016	iPhone 7 Plus	1	0.039	11.1	UN 3481 PI 967
A1661	2017	iPhone 7 Plus	1	0.039	11.1	UN 3481 PI 967
A1662	2016	iPhone SE	1	0.026	6.21	UN 3481 PI 967
A1687	2015	iPhone 6s Plus	1	0.041	10.61	UN 3481 PI 967
A1688	2015	iPhone 6s	1	0.025	6.39	UN 3481 PI 967
A1690	2015	iPhone 6s Plus	1	0.041	10.61	UN 3481 PI 967
A1691	2015	iPhone 6s	1	0.025	6.39	UN 3481 PI 967
A1699	2015	iPhone 6s Plus	1	0.041	10.61	UN 3481 PI 967
A1700	2015	iPhone 6s	1	0.025	6.39	UN 3481 PI 967
A1722	2016	AirPod (left)	1	0.002	0.95	UN 3481 PI 967
A1723	2016	iPhone SE	1	0.025	6.21	UN 3481 PI 967
A1724	2016	iPhone SE	1	0.025	6.21	UN 3481 PI 967
A1757	2016	Apple Watch Series 2 38mm	1	0.005	1.03	UN 3481 PI 967
A1758	2016	Apple Watch Series 2 42mm	1	0.006	1.27	UN 3481 PI 967
A1765	2016	SmartCase iPhone 7	1	0.0379	8.98	UN 3480 PI 965
A1778	2016	iPhone 7	1	0.029	7.45	UN 3481 PI 967
A1778	2017	iPhone 7	1	0.029	7.45	UN 3481 PI 967
A1779 (JP)	2016	iPhone 7	1	0.029	7.45	UN 3481 PI 967
A1779	2017	iPhone 7	1	0.029	7.45	UN 3481 PI 967
A1780 (non-US)	2016	iPhone 7	1	0.029	7.45	UN 3481 PI 967
A1780	2017	iPhone 7	1	0.029	7.45	UN 3481 PI 967
A1784	2016	iPhone 7 Plus	1	0.039	11.1	UN 3481 PI 967
A1784	2017	iPhone 7 Plus	1	0.039	11.1	UN 3481 PI 967
A1784	2017	iPhone 7 Plus Product Red Special Edition	1	0.039	11.1	UN 3481 PI 967
A1785	2016	iPhone 7 Plus	1	0.039	11.1	UN 3481 PI 967
A1785	2017	iPhone 7 Plus Product Red Special Edition	1	0.039	11.1	UN 3481 PI 967
A1786	2016	iPhone 7 Plus	1	0.039	11.1	UN 3481 PI 967
A1786	2017	iPhone 7 Plus	1	0.039	11.1	UN 3481 PI 967
A1786	2017	iPhone 7 Plus Product Red Special Edition	1	0.039	11.1	UN 3481 PI 967
A1797	2016	iPhone 7 Plus	1	0.039	11.1	UN 3481 PI 967
A1799	2016	iPhone 7	1	0.029	7.45	UN 3481 PI 967
A1802	2016	Apple Watch Series 1 38mm	1	0.005	0.93	UN 3481 PI 967
A1803	2016	Apple Watch Series 1 42mm	1	0.005	0.93	UN 3481 PI 967
A1816	2016	Apple Watch Series 2 38mm	1	0.005	1.03	UN 3481 PI 967
A1817	2016	Apple Watch Series 2 42mm	1	0.006	1.27	UN 3481 PI 967
A1842	2017	Apple TV 4K w/ (A1962) Remote	- 1	- 0.009	- 1.56	UN 3481 PI 967
A1843	2017	Magic Keyboard with Numeric Keypad	1	0.016	2.98	UN 3481 PI 967
A1843	2018	Magic Keyboard with Numeric Keypad	1	0.016	2.98	UN 3481 PI 967

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Single cell batteries ≤ 20Wh						
Model Numbers	Announce	Type	Battery(s) per Product	Battery Weight (kg)	Wh Rating	Classification (Air)
A1858	2017	Apple Watch Series 2	1	0.005	1	UN 3481 PI 967
A1859	2017	Apple Watch Series 2	1	0.005	1	UN 3481 PI 967
A1860	2017	Apple Watch LTE Series 3	1	0.005	1.07	UN 3481 PI 967
A1860	2018	Apple Watch LTE Series 3	1	0.005	1.07	UN 3481 PI 967
A1861	2017	Apple Watch LTE Series 3	1	0.005	1.07	UN 3481 PI 967
A1861	2018	Apple Watch LTE Series 3	1	0.006	1.34	UN 3481 PI 967
A1862	2017	iMac Pro 27-inch with Retina 5K display w/ (A1843) Magic Keyboard w/Numeric Keypad and (A1657) Magic Mouse 2	- 1 1	- 0.016 0.042	- 2.98 7.07	UN 3481 PI 967
A1862	2017	iMac Pro 27-inch with Retina 5K display w/ (A1843) Magic Keyboard w/Numeric Keypad and (A1535) Magic Trackpad 2	- 1 1	- 0.016 0.037	- 2.98 7.73	UN 3481 PI 967
A1862	2017	iMac Pro 27-inch with Retina 5K display w/ (A1843) Magic Keyboard w/Numeric Keypad, (A1657) Magic Mouse 2 and (A1535) Magic Trackpad 2	- 1 1 1	- 0.016 0.042 0.037	- 2.98 7.07 7.73	UN 3481 PI 967
A1863	2017	4.7" iPhone 8	1	0.026	6.96	UN 3481 PI 967
A1863	2018	4.7" iPhone 8	1	0.026	6.96	UN 3481 PI 967
A1864	2017	5.5" iPhone 8 Plus	1	0.038	10.28	UN 3481 PI 967
A1864	2018	5.5" iPhone 8 Plus	1	0.038	10.28	UN 3481 PI 967
A1889	2017	Apple Watch LTE Series 3	1	0.005	1.07	UN 3481 PI 967
A1889	2018	Apple Watch LTE Series 3	1	0.005	1.07	UN 3481 PI 967
A1890	2017	Apple Watch LTE Series 3	1	0.005	1.07	UN 3481 PI 967
A1890	2018	Apple Watch LTE Series 3	1	0.005	1.07	UN 3481 PI 967
A1891	2017	Apple Watch LTE Series 3	1	0.005	1.07	UN 3481 PI 967
A1891	2018	Apple Watch LTE Series 3	1	0.006	1.34	UN 3481 PI 967
A1892	2017	Apple Watch LTE Series 3	1	0.005	1.07	UN 3481 PI 967
A1892	2018	Apple Watch LTE Series 3	1	0.006	1.34	UN 3481 PI 967
A1897	2017	5.5" iPhone 8 Plus	1	0.038	10.28	UN 3481 PI 967
A1897	2018	5.5" iPhone 8 Plus	1	0.038	10.28	UN 3481 PI 967
A1898	2017	5.5" iPhone 8 Plus	1	0.038	10.28	UN 3481 PI 967
A1898	2018	5.5" iPhone 8 Plus	1	0.038	10.28	UN 3481 PI 967
A1899	2017	5.5" iPhone 8 Plus	1	0.038	10.28	UN 3481 PI 967
A1899	2018	5.5" iPhone 8 Plus	1	0.038	10.28	UN 3481 PI 967
A1905	2017	4.7" iPhone 8	1	0.026	6.96	UN 3481 PI 967
A1905	2018	4.7" iPhone 8	1	0.026	6.96	UN 3481 PI 967
A1906	2017	4.7" iPhone 8	1	0.026	6.96	UN 3481 PI 967
A1906	2018	4.7" iPhone 8	1	0.026	6.96	UN 3481 PI 967
A1907	2017	4.7" iPhone 8	1	0.026	6.96	UN 3481 PI 967
A1907	2018	4.7" iPhone 8	1	0.026	6.96	UN 3481 PI 967
A1920	2018	iPhone XS	1	0.041	10.13	UN 3481 PI 967
A1938	2019	Wireless Charging Case	1	0.009	1.52	UN 3480 PI 965

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Single cell batteries ≤ 20Wh						
Model Numbers	Announce	Type	Battery(s) per Product	Battery Weight (kg)	Wh Rating	Classification (Air)
A1938 A2031 A2032	2019	AirPods in Wireless Charging Case	1 1 1	0.009 0.002 0.002	1.52 0.95 0.95	UN 3481 PI 967
A1962	2017	APPLE SIRI REMOTE	1	0.009	1.56	UN 3481 PI 967
A1975	2018	Apple Watch Series 4 40	1	0.004	0.86	UN 3481 PI 967
A1976	2018	Apple Watch Series 4 44	1	0.005	1.12	UN 3481 PI 967
A1977	2018	Apple Watch Series 4 40	1	0.004	0.86	UN 3481 PI 967
A1978	2018	Apple Watch Series 4 44	1	0.005	1.12	UN 3481 PI 967
A1991	2019	Mac Pro	2	0.058	7.07	UN 3481 PI 967
A2007	2018	Apple Watch Series 4 40	1	0.004	0.86	UN 3481 PI 967
A2008	2018	Apple Watch Series 4 44	1	0.005	1.12	UN 3481 PI 967
A2031	2019	AirPod (left)	1	0.002	0.95	UN 3481 PI 967
A2032	2019	AirPod (right)	1	0.002	0.95	UN 3481 PI 967
A2051	2018	Apple Pencil 2 <sup>nd</sup> Gen	1	0.004	0.21	UN 3481 PI 967
A2097	2018	iPhone XS	1	0.041	10.13	UN 3481 PI 967
A2098	2018	iPhone XS	1	0.041	10.13	UN 3481 PI 967
A2099	2018	iPhone XS	1	0.041	10.13	UN 3481 PI 967
A2100	2018	iPhone XS	1	0.041	10.13	UN 3481 PI 967
A2115	2019	iMac 27-inch w/ Magic Mouse 2 (A1657) Magic Trackpad 2 (A1535) and Magic Keyboard (A1644)	- 1 1 1	- 0.042 0.037 0.016	- 7.07 7.65 2.98	UN 3481 PI 967
A2115	2019	iMac 27-inch w/ Magic Mouse 2 (A1657) Magic Trackpad 2 (A1535) and Magic Keyboard with numeric keypad (A1843)	- 1 1 1	- 0.042 0.037 0.016	- 7.07 7.65 2.98	UN 3481 PI 967
A2115	2019	iMac 27-inch w/ Magic Mouse 2 (A1657) Magic Keyboard (A1644)	- 1 1	- 0.042 0.016	- 7.07 2.98	UN 3481 PI 967
A2115	2019	iMac 27-inch w/ Magic Mouse 2 (A1657) Magic Keyboard with numeric keypad (A1843)	- 1 1	- 0.042 0.016	- 7.07 2.98	UN 3481 PI 967
A2115	2019	iMac 27-inch w/ Magic Trackpad 2 (A1535) and Magic Keyboard (A1644)	- 1 1	- 0.037 0.016	- 7.65 2.98	UN 3481 PI 967
A2115	2019	iMac 27-inch w/ Magic Trackpad 2 (A1535) and Magic Keyboard with numeric keypad (A1843)	- 1 1	- 0.037 0.016	- 7.65 2.98	UN 3481 PI 967
A2116	2019	iMac 27-inch w/ Magic Mouse 2 (A1657) Magic Trackpad 2 (A1535) and Magic Keyboard (A1644)	- 1 1 1	- 0.042 0.037 0.016	- 7.07 7.65 2.98	UN 3481 PI 967
A2116	2019	iMac 27-inch w/ Magic Mouse 2 (A1657) Magic Trackpad 2 (A1535) and Magic Keyboard with numeric keypad (A1843)	- 1 1 1	- 0.042 0.037 0.016	- 7.07 7.65 2.98	UN 3481 PI 967
A2116	2019	iMac 27-inch w/ Magic Mouse 2 (A1657) Magic Keyboard (A1644)	- 1 1	- 0.042 0.016	- 7.07 2.98	UN 3481 PI 967
A2116	2019	iMac 27-inch w/ Magic Mouse 2 (A1657) Magic Keyboard with numeric keypad (A1843)	- 1 1	- 0.042 0.016	- 7.07 2.98	UN 3481 PI 967
A2116	2019	iMac 27-inch w/ Magic Trackpad 2 (A1535) and Magic Keyboard (A1644)	- 1 1	- 0.037 0.016	- 7.65 2.98	UN 3481 PI 967
A2116	2019	iMac 27-inch w/ Magic Trackpad 2 (A1535) and Magic Keyboard with numeric keypad (A1843)	- 1 1	- 0.037 0.016	- 7.65 2.98	UN 3481 PI 967



# Apple Product Information Sheet

Single cell batteries ≤ 20Wh						
Model Numbers	Announce	Type	Battery(s) per Product	Battery Weight (kg)	Wh Rating	Classification (Air)
A2124	2019	iPad Mini Wi-Fi + Cellular	1	0.098	19.32	UN 3481 PI 967
A2126	2019	iPad Mini Wi-Fi + Cellular	1	0.098	19.32	UN 3481 PI 967
A2133	2019	iPad Mini Wi-Fi	1	0.098	19.32	UN 3481 PI 967
A2178	2019	iPod Touch 7 <sup>th</sup> Gen	1	0.018	3.99	UN 3481 PI 967
A2215	2019	iPhone 11 PRO	1	0.048	11.67	UN 3481 PI 967
A2218	2019	iPhone 11 PRO MAX	1	0.065	15.04	UN 3481 PI 967
A2221	2019	iPhone 11	1	0.047	11.91	UN 3481 PI 967
A2092	2019	Apple Watch Series 5 40	1	0.005	0.95	UN 3481 PI 967
A2093	2019	Apple Watch Series 5 44	1	0.005	1.13	UN 3481 PI 967
A2094	2019	Apple Watch Series 5 40	1	0.005	0.95	UN 3481 PI 967
A2095	2019	Apple Watch Series 5 44	1	0.005	1.13	UN 3481 PI 967

The following table provides Apple Product Battery Information:

Multi-cell batteries ≤ 100Wh						
Model Numbers	Announce	Type	Battery(s) per Product	Battery Weight (kg)	Wh Rating	Classification (Air)
A1219	2010	iPad Wi-Fi only 1st gen	1	0.160	24.8	UN 3481 PI 967
A1278	2011	MacBook Pro 13-inch	1	0.369	63.5	UN 3481 PI 967
A1278	2012	MacBook Pro 13-inch	1	0.369	63.5	UN 3481 PI 967
A1286	2011	MacBook Pro 15-inch	1	0.470	77.5	UN 3481 PI 967
A1286	2012	MacBook Pro 15-inch	1	0.470	77.5	UN 3481 PI 967
A1337	2010	iPad Wi-Fi + Cellular 1st gen	1	0.160	24.8	UN 3481 PI 967
A1347	2010	MacBook 13-inch	1	0.363	60	UN 3481 PI 967
A1369	2010	MacBook Air 13-inch	1	0.310	35	UN 3481 PI 967
A1369	2011	MacBook Air 13-inch	1	0.310	50	UN 3481 PI 967
A1369	2012	MacBook Air 13-inch	1	0.310	50	UN 3481 PI 967
A1370	2010	MacBook Air 11-inch	1	0.234	35	UN 3481 PI 967
A1370	2011	MacBook Air 11-inch	1	0.234	35	UN 3481 PI 967
A1395	2011	iPad 2nd Gen Wi-Fi only	1	0.144	25	UN 3481 PI 967
A1395	2012	iPad 2nd Gen Wi-Fi only	1	0.144	25	UN 3481 PI 967
A1396	2011	iPad 2nd Gen Wi-Fi + Cellular	1	0.144	25	UN 3481 PI 967
A1397	2011	iPad 2nd Gen Wi-Fi + Cellular (CDMA only)	1	0.144	25	UN 3481 PI 967
A1398	2012	MacBook Pro 15-inch with Retina display	1	0.480	95	UN 3481 PI 967
A1398	2013	MacBook Pro 15-inch with Retina display	1	0.485	95	UN 3481 PI 967
A1398	2014	MacBook Pro 15-inch with Retina display	1	0.485	95	UN 3481 PI 967
A1398	2015	MacBook Pro 15-inch with Retina display	1	0.459	99.5	UN 3481 PI 967
A1403	2012	iPad 3rd Gen Wi-Fi + Cellular (CDMA only)	1	0.214	43	UN 3481 PI 967
A1416	2012	iPad 3rd Gen Wi-Fi only	1	0.485	43	UN 3481 PI 967
A1425	2012	MacBook Pro 13-inch with Retina display	1	0.410	74	UN 3481 PI 967
A1425	2013	MacBook Pro 13-inch with Retina display	1	0.410	74	UN 3481 PI 967
A1430	2012	iPad 3rd Gen Wi-Fi + Cellular	1	0.214	43	UN 3481 PI 967
A1458	2012	iPad with Retina display Wi-Fi only	1	0.214	43	UN 3481 PI 967
A1459	2012	iPad with Retina display Wi-Fi + Cellular	1	0.214	43	UN 3481 PI 967
A1460	2012	iPad with Retina display Wi-Fi + Cellular (CDMA only)	1	0.214	43	UN 3481 PI 967
A1465	2012	MacBook Air 11-inch	1	0.310	50	UN 3481 PI 967
A1465	2013	MacBook Air 11-inch	1	0.235	38.75	UN 3481 PI 967
A1465	2014	MacBook Air 11-inch	1	0.235	38.75	UN 3481 PI 967
A1465	2015	MacBook Air 11-inch	1	0.235	38.75	UN 3481 PI 967
A1466	2012	MacBook Air 13-inch	1	0.312	54.4	UN 3481 PI 967
A1466	2013	MacBook Air 13-inch	1	0.312	54.4	UN 3481 PI 967
A1466	2014	MacBook Air 13-inch	1	0.312	54.4	UN 3481 PI 967
A1466	2015	MacBook Air 13-inch	1	0.312	54.4	UN 3481 PI 967
A1466	2017	MacBook Air 13-inch	1	0.312	54.4	UN 3481 PI 967

Multi-cell batteries ≤ 100Wh						
Model Numbers	Announce	Type	Battery(s) per Product	Battery Weight (kg)	Wh Rating	Classification (Air)
A1474	2013	iPad Air Wi-Fi only (9-inch)	1	0.165	32.9	UN 3481 PI 967
A1475	2013	iPad Air Wi-Fi + Cellular (9-inch)	1	0.165	32.9	UN 3481 PI 967
A1476	2014	iPad Air Wi-Fi + Cellular (TDD, China) (9-inch)	1	0.165	32.9	UN 3481 PI 967
A1489	2013	iPad mini 2 with Retina Display Wi-Fi only (7-inch)	1	0.115	24.3	UN 3481 PI 967
A1490	2013	iPad mini 2 with Retina Display Wi-Fi + Cellular (7-inch)	1	0.115	24.3	UN 3481 PI 967
A1491	2014	iPad mini 2 with Retina Display Wi-Fi + Cellular (TDD, China) (7-inch)	1	0.115	24.3	UN 3481 PI 967
A1502	2013	MacBook Air 13-inch with Retina display	1	0.341	71.8	UN 3481 PI 967
A1502	2014	MacBook Air 13-inch with Retina display	1	0.341	71.8	UN 3481 PI 967
A1502	2015	MacBook Air 13-inch with Retina display	1	0.355	74.9	UN 3481 PI 967
A1534	2016	Macbook Retina 12-inch	1	0.194	41.41	UN 3481 PI 967
A1534	2015	MacBook Retina 12-inch	1	0.194	40	UN 3481 PI 967
A1566	2014	iPad Air 2 Wi-Fi only	1	0.132	27.82	UN 3481 PI 967
A1567	2014	iPad Air 2 Wi-Fi + Cellular	1	0.132	27.62	UN 3481 PI 967
A1584	2015	iPad Pro 12.9 inch Wi-Fi only	1	0.175	38.8	UN 3481 PI 967
A1599	2014	iPad mini 3 Wi-Fi only (7-inch)	1	0.115	24.3	UN 3481 PI 967
A1600	2014	iPad mini 3 Wi-Fi + Cellular (7-inch)	1	0.115	24.3	UN 3481 PI 967
A1601	2014	iPad mini 3 Wi-Fi + Cellular (TDD, China) (7-inch)	1	0.115	24.3	UN 3481 PI 967
A1652	2015	iPad Pro 12.9-inch Wi-Fi + Cellular	1	0.175	38.8	UN 3481 PI 967
A1670	2017	iPad Pro 12.9-inch Wi-Fi	1	0.196	41.4	UN 3481 PI 967
A1671	2017	iPad Pro 12.9-inch Wi-Fi + Cellular	1	0.196	41.4	UN 3481 PI 967
A1673	2016	iPad Pro 9.7-inch Wi-Fi only	1	0.136	27.91	UN 3481 PI 967
A1674	2016	iPad Pro 9.7-inch Wi-Fi + Cellular	1	0.136	27.91	UN 3481 PI 967
A1675	2016	iPad Pro 9.7-inch Wi-Fi + Cellular	1	0.136	27.91	UN 3481 PI 967
A1701	2017	iPad Pro 10.5-inch Wi-Fi	1	0.147	30.8	UN 3481 PI 967
A1705	2017	Macbook 12-inch	1	0.194	41.41	UN 3481 PI 967
A1706	2016	MacBook Pro 13-inch	1	0.223	49.2	UN 3481 PI 967
A1707	2016	MacBook Pro 15-inch	1	0.240	76	UN 3481 PI 967
A1707	2017	MacBook Pro 15-inch with Touch Bar	1	0.240	76	UN 3481 PI 967
A1708	2016	MacBook Pro 13-inch	1	0.246	54.5	UN 3481 PI 967
A1708	2017	MacBook Pro 13-inch	1	0.246	54.5	UN 3481 PI 967
A1709	2017	iPad Pro 10.5-inch Wi-Fi + Cellular	1	0.147	30.8	UN 3481 PI 967
A1818	2017	Macbook 12-inch	1	0.194	41.41	UN 3481 PI 967
A1819	2017	MacBook Pro 13-inch	1	0.223	49.2	UN 3481 PI 967
A1821	2017	iPad Pro 12.9-inch Wi-Fi + Cellular	1	0.196	41.4	UN 3481 PI 967
A1822	2017	iPad 9.7 inch (5 <sup>th</sup> gen)	1	0.167	32.9	UN 3481 PI 967
A1823	2017	iPad 9.7 inch + Cellular (5 <sup>th</sup> gen)	1	0.167	32.9	UN 3481 PI 967
A1852	2017	iPad Pro 10.5-inch Wi-Fi + Cellular	1	0.147	30.8	UN 3481 PI 967
A1865	2017	5.8" iPhone X (GSM and CDMA)	1	0.042	10.35	UN 3481 PI 967

Multi-cell batteries ≤ 100Wh						
Model Numbers	Announce	Type	Battery(s) per Product	Battery Weight (kg)	Wh Rating	Classification (Air)
A1876	2018	iPad Pro Wi-Fi 13-inch 3 <sup>rd</sup> Gen	1	0.168	36.59	UN 3481 PI 967
A1893	2018	iPad 9.7 inch Wi-Fi	1	0.167	32.9	UN 3481 PI 967
A1895	2018	iPad Pro Wi-Fi + Cellular 13-inch 3 <sup>rd</sup> Gen	1	0.168	36.59	UN 3481 PI 967
A1901	2017	5.8" iPhone X (GSM)	1	0.042	10.35	UN 3481 PI 967
A1902	2017	5.8" iPhone X (Japan)	1	0.042	10.35	UN 3481 PI 967
A1903	2017	5.8" iPhone X	1	0.042	10.35	UN 3481 PI 967
A1904	2017	5.8" iPhone X	1	0.042	10.35	UN 3481 PI 967
A1921	2018	iPhone Xs Max	1	0.050	12.08	UN 3481 PI 967
A1932	2018	Macbook Air 13.3 inch	1	0.250	50.3	UN 3481 PI 967
A1932	2019	Macbook Air 13.3 inch	1	0.250	50.3	UN 3481 PI 967
A1934	2018	iPad Pro Wi-Fi + Cellular 11-inch 3 <sup>rd</sup> Gen	1	0.132	29.45	UN 3481 PI 967
A1954	2018	iPad 9.7 inch Wi-Fi + Cellular	1	0.167	32.9	UN 3481 PI 967
A1979	2018	iPad Pro WLAN + Cellular 11-inch 3 <sup>rd</sup> Gen	1	0.132	29.45	UN 3481 PI 967
A1980	2018	iPad Pro Wi-Fi 11-inch 3 <sup>rd</sup> Gen	1	0.132	29.45	UN 3481 PI 967
A1983	2018	iPad Pro WLAN + Cellular 13-inch 3 <sup>rd</sup> Gen	1	0.168	36.59	UN 3481 PI 967
A1989	2018	MacBook Pro 13"	1	0.252	58	UN 3481 PI 967
A1989	2019	MacBook Pro 13.3-inch	1	0.252	58	UN 3481 PI 967
A1990	2018	MacBook Pro 15"	1	0.365	83.6	UN 3481 PI 967
A1990	2019	MacBook Pro 15.4-inch	1	0.365	83.6	UN 3481 PI 967
A1984	2018	iPhone XR	1	0.046	11.16	UN 3481 PI 967
A2013	2018	iPad Pro Wi-Fi + Cellular 11-inch 3 <sup>rd</sup> Gen	1	0.132	29.45	UN 3481 PI 967
A2014	2018	iPad Pro Wi-Fi + Cellular 13-inch 3 <sup>rd</sup> Gen	1	0.168	36.59	UN 3481 PI 967
A2070	2019	iPhone XS Smart Battery Case	1	0.044	10.4	UN 3480 PI 965
A2071	2019	iPhone XS MAX Smart Battery Case	1	0.044	10.4	UN 3480 PI 965
A2101	2018	iPhone XS Max	1	0.050	12.08	UN 3481 PI 967
A2102	2018	iPhone XS Max	1	0.050	12.08	UN 3481 PI 967
A2103	2018	iPhone XS Max	1	0.050	12.08	UN 3481 PI 967
A2104	2018	iPhone XS Max	1	0.050	12.08	UN 3481 PI 967
A2105	2018	iPhone XR	1	0.046	11.16	UN 3481 PI 967
A2106	2018	iPhone XR	1	0.046	11.16	UN 3481 PI 967
A2107	2018	iPhone XR	1	0.046	11.16	UN 3481 PI 967
A2108	2018	iPhone XR	1	0.046	11.16	UN 3481 PI 967
A2121	2019	iPhone XR Smart Battery Case	1	0.044	10.4	UN 3480 PI 965
A2123	2019	iPad Air Wi-Fi + Cellular	1	0.147	30.8	UN 3481 PI 967
A2152	2019	iPad Air Wi-Fi	1	0.147	30.8	UN 3481 PI 967
A2153	2019	iPad Air Wi-Fi + Cellular	1	0.147	30.8	UN 3481 PI 967
A2159	2019	Macbook Pro 13.3 inch	1	0.250	58.2	UN 3481 PI 967
A2197	2019	iPad Wi Fi	1	0.173	32.9	UN 3481 PI 967
A2198	2019	iPad Wi Fi + Cell	1	0.173	32.9	UN 3481 PI 967

### **REGULATORY INFORMATION**

If hazardous materials are present in the workplace, Material Safety Data Sheets (MSDS)/Safety Data Sheets (SDS) are required by various national and international occupational worker safety regulations. However, MSDS/SDS's are not required for articles (see 29 CFR 1910.1200 (b)(6)(v)). Exceptions also apply for consumer products as defined in 29 CFR 1910.1200 (b)(6)(ix). An article is defined as a manufactured item other than a fluid or particle; (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g. minute or trace amounts of a hazardous chemical, and does not pose a physical hazard or health risk to employees.

### **GENERAL RECOMMENDATIONS**

CAUTION: Under extreme conditions, a risk of fire, explosion and burns exists. Do not short-circuit, crush, puncture, heat, incinerate or disassemble cells

## Links to External Coin Cell Supplier Documents

Panasonic

<http://industrial.panasonic.com/ww/downloads/product-safety-data-sheet>

742-0048 (CR2032)

742-0062 (BR2032)

742-0064 (BR2330)

RAYOVAC

<http://www.rayovacindustrial.com/Technical-OEM/SDS.aspx>

742-0080 (BR2032)