

## Section I – Product and Company Information

**Product:** Lithium ion and Lithium ion polymer batteries  
**Models:** See Microsoft Product Battery Information Table, Section 14  
**Effective Date:** September 26, 2024  
**Version:** 2024C

**Manufacturer:**  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399  
Tel 425 882 8080

## Section II – Composition Information

Not chemically dangerous during normal use in accordance with Microsoft recommendations as stated in the user manuals or other similar documentation. Exposure to hazardous chemicals is not expected with normal handling and use. In particular, the cell or battery should not be opened or burned.

## Section III – Hazards Identification

**Emergency Overview:** Do not open or disassemble cells or batteries or expose them to fire or open flame. Do not puncture or deform. Cells and batteries present a hazard only if mishandled in a way that causes damage to the cell or battery or compromises their integrity.

**Primary Routes of Exposure:** Risk of exposure to hazardous materials will only occur if the cell or battery is physically, thermally or electrically abused to the extent that the integrity of the cell or battery is compromised. In this case, exposure to the electrolyte can occur through ingestion, inhalation, eye contact and skin contact.

**Potential Health Effects:** If the battery or cell has been damaged or ruptured, the electrolyte solution, which is corrosive, could be released and cause burns to the eyes, skin or respiratory tract. Ingestion of the electrolyte can cause serious burns of the gastrointestinal tract.

## Section IV – First Aid Measures

If you get electrolyte in your eyes, flush with water for 15 minutes without rubbing and immediately contact a physician. If you get electrolyte on your skin wash the area immediately with soap and water. If irritation continues, contact a physician. If the battery is ingested, call the National Capital Poison Center (NCPC) at 202-625-3333 (Collect) or your local poison center immediately.

## Section V – Firefighting Measures

In case of fire, you can use dry chemical, alcohol resistant foam or carbon dioxide fire extinguishers. Cooling the exterior of the cells or batteries will help prevent rupturing. Burning of these cells or batteries will generate toxic fumes. Fire fighters should use self-contained breathing apparatus. Detailed information on fighting a lithium ion battery fire can be found in Guide 147 (Lithium Ion Batteries) of the US DOT Emergency Response Guide.

## Section VI – Accidental Release Measures

**Containment Techniques:** Damaged cells or batteries that are not hot or venting should be placed in a sealed plastic bag or container. Absorb any spilled liquid with inert material.

**Personal Precautions:** Safety glasses and neoprene or natural rubber gloves should be worn when cleaning up damaged or leaking cells. Keep unnecessary personnel away from the immediate area.

## **Section VII – Handling and Storage**

**Handling:** Use only approved charging equipment. Do not expose cell or battery to extreme heat or fire. Do not disassemble, puncture, crush or burn battery. Avoid handling in a way that would cause a short circuit.

**Storage:** Store batteries in a dry location. To minimize any adverse effects on battery performance it is recommended that the batteries be kept at room temperature (25°C +/- 5°C). Elevated temperatures can result in shortened cell life. Keep out of reach of children.

## **Section VIII – Exposure Controls / Personal Protection**

No personal protection is required during normal handling and use. Exposure to the ingredients contained within the battery could be harmful under some circumstances. In case of exposure to battery contents, wash affected area for at least 15 minutes with generous amounts of water and seek medical attention.

## **Section IX - Physical and Chemical Properties**

These batteries are solid articles. Properties such as odor, pH, vapor pressure, solubility, etc. are not applicable.

## **Section X - Stability and Reactivity**

**Reactivity:** None during normal handling and use

**Incompatibility:** None during normal handling and use

**Hazardous Decomposition Products:** None during normal handling and use

**Conditions to Avoid:** The cells or batteries should not be opened, disassembled, crushed, burned, or exposed to high temperatures.

## **Section XI - Toxicological Information**

There are no known toxicological properties of the batteries during normal handling and use.

## **Section XII - Ecological Information**

There are no known ecological risks of the batteries during normal handling and use.

## **Section XIII – Disposal**

Microsoft product batteries contain recyclable materials and should not be put into the municipal waste stream. It is recommended that cells and batteries be completely discharged prior to disposal and/or the terminals taped to prevent short circuiting. Dispose of in accordance with local, state and federal regulations. Do not dispose of in fire.

## Section XIV - Transport Information

All Microsoft product cells and batteries have been successfully tested and comply with the UN Model Regulations, Manual of Test and Criteria, Part III, subsection 38.3. Product cells and batteries have been manufactured under a quality management program as specified in 2.9.4 of the UN Model Regulations.

All Microsoft Lithium ion product cells are rated at 20 Watt-hours or less and lithium ion batteries are rated at 100 Watt-hours or less and 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.
  - 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
- Canadian Transport of Dangerous Goods Regulations (TDGR) Special Provision 34
- U.S. Department of Transportation (DOT) 49 CFR 173.185 and 173.185(c)

The following table provides Microsoft Product Battery Information:

Model Number	Description	Cells per Battery	Batteries per Product	Battery Weight (kg)	Rating (Wh) Or Lithium Content (g)	UNID & Proper Shipping Name
1481	Xbox 360 Wireless Headset with Bluetooth	1	1	0.004	0.74 Wh	UN3481 Lithium ion batteries contained in equipment
1514	Surface Pro	2	1	0.22	42.00 Wh	UN3481 Lithium ion batteries contained in equipment
1516	Surface RT	2	1	0.17	31.50 Wh	UN3481 Lithium ion batteries contained in equipment
1556	Xbox One Play & Charge Kit	2	1	0.0308	4.66 Wh	UN3480 Lithium ion batteries
1558	Sculpt Ergonomic Number Pad	1	1	0.0045	0.09 g	UN3091 Lithium metal batteries contained in equipment
1572	Surface 2	2	1	0.16	31.30 Wh	UN3481 Lithium ion batteries contained in equipment
1601	Surface Pro 2	2	1	0.22	42.00 Wh	UN3481 Lithium ion batteries contained in equipment
1602	Surface Power Cover	4	1	0.21	29.94 Wh	UN3481 Lithium ion batteries contained in equipment
1619	Microsoft Band	1	1	0.0039	0.36 Wh	UN3481 Lithium ion batteries contained in equipment
1631	Surface Pro 3	4	1	0.19	42.16 Wh	UN3481 Lithium ion batteries contained in equipment
1640	Surface Hub Device Pen	1	1	0.0255	1.18 Wh	UN3481 Lithium ion batteries contained in equipment
1645	Surface 3	2	1	0.134	27.50 Wh	UN3481 Lithium ion batteries contained in equipment
1657	Surface 3 with LTE	2	1	0.134	27.50 Wh	UN3481 Lithium ion batteries contained in equipment

# Product Data Sheet

Model Number	Description	Cells per Battery	Batteries per Product	Battery Weight (kg)	Rating (Wh) Or Lithium Content (g)	UNID & Proper Shipping Name
1671	Universal Mobile Keyboard	1	1	0.008	1.11 Wh	UN3481 Lithium ion batteries contained in equipment
1688	HoloLens	6	1	0.012	13.00 Wh	UN3481 Lithium ion batteries contained in equipment
1695	Universal Foldable Keyboard	1	1	0.0068	0.61 Wh	UN3481 Lithium ion batteries contained in equipment
1703	Surface Book	2	1	0.088	18.90 Wh	UN3481 Lithium ion batteries contained in equipment
1704	Surface Book Keyboard Base	4	1	0.2455	52.76 Wh	UN3481 Lithium ion batteries contained in equipment
1705	Surface Book Keyboard Base	4	1	0.2455	52.76 Wh	UN3481 Lithium ion batteries contained in equipment
1707	Surface Studio Surface Studio 2	1	1	0.0032	0.07 g	UN3091 Lithium metal batteries contained in equipment
1721	Microsoft Band 2 (Small)	1	1	0.0034	0.67 Wh	UN3481 Lithium ion batteries contained in equipment
1721	Microsoft Band 2 (Medium / Large)	1	1	0.0038	0.76 Wh	UN3481 Lithium ion batteries contained in equipment
1724	Surface Pro 4	2	1	0.1788	39.47 Wh	UN3481 Lithium ion batteries contained in equipment
1727	Xbox One Play & Charge Kit	2	1	0.0308	4.66 Wh	UN3480 Lithium ion batteries
1754	HoloLens Clicker	1	1	0.004	0.19 Wh	UN3481 Lithium ion batteries contained in equipment
1769	Surface Laptop (i5/i7) Surface Laptop 2 (i5/i7)	4	1	0.1995	45.19 Wh	UN3481 Lithium ion batteries contained in equipment
1780	Modern Keyboard with FPR	2	1	0.028	3.4 Wh	UN3481 Lithium ion batteries contained in equipment
1782	Surface Laptop (CoreM)	4	1	0.1995	45.19 Wh	UN3481 Lithium ion batteries contained in equipment
1785	Surface Book Performance Base	4	1	0.264	59.4 Wh	UN3481 Lithium ion batteries contained in equipment
1793	Surface Book 2 15" - Display	2	1	0.098	23.2 Wh	UN3481 Lithium ion batteries contained in equipment
1795	Non-GPU Base for Surface Book 2 15"	6	1	0.250	62.2 Wh	UN3481 Lithium ion batteries contained in equipment
1796	Surface Pro (5 <sup>th</sup> Gen) Surface Pro 6	4	1	0.185	45 Wh	UN3481 Lithium ion batteries contained in equipment
1797	Xbox Elite Wireless Controller Series 2	1	1	0.04	7.79 Wh	UN3481 Lithium ion batteries contained in equipment
1807	Surface Pro (LTE)	4	1	0.185	45 Wh	UN3481 Lithium ion batteries contained in equipment
1813	GPU Base for Surface Book 2 15"	6	1	0.250	62.2 Wh	UN3481 Lithium ion batteries contained in equipment
1818	Surface Precision Mouse	1	1	0.017	2.31 Wh	UN3481 Lithium ion batteries contained in equipment
1824	Surface Go	2	1	0.100	26.77 Wh	UN3481 Lithium ion batteries contained in equipment
1825	Surface Go LTE	2	1	0.100	26.77 Wh	UN3481 Lithium ion batteries contained in equipment
1830	Surface Headphones	1	1	0.0094	1.9 Wh	UN3481 Lithium ion batteries contained in equipment
1832	Surface Book 2 13" - Tablet	4	1	0.082	18 Wh	UN3481 Lithium ion batteries contained in equipment
1834	Non-GPU Bottom for Surface Book 2 13"	6	1	0.235	52.8 Wh	UN3481 Lithium ion batteries contained in equipment

# Product Data Sheet

Model Number	Description	Cells per Battery	Batteries per Product	Battery Weight (kg)	Rating (Wh) Or Lithium Content (g)	UNID & Proper Shipping Name
1835	GPU Bottom for Surface Book 2 13"	6	1	0.237	57.3 Wh	UN3481 Lithium ion batteries contained in equipment
1836	Xbox Adaptive Controller	1	1	0.034	7.79 Wh	UN3481 Lithium ion batteries contained in equipment
1843	Surface Hub 2S Surface Hub 3	1	1	0.0032	0.07 g	UN3091 Lithium metal batteries contained in equipment
1852	Surface Earbuds (Right) <i>See also 1938, 1916</i>	1	1	0.0016	0.222 Wh	UN3481 Lithium ion batteries contained in equipment
1853	Surface Slim Pen	1	1	0.0005	0.038 Wh	UN3481 Lithium ion batteries contained in equipment
1855	HoloLens 2	4	1	0.081	16.7 Wh	UN3481 Lithium ion batteries contained in equipment
1866	Surface Pro 7	4	1	0.190	45 Wh	UN3481 Lithium ion batteries contained in equipment
1867	Surface Laptop 3 13.5" Fabric	6	1	0.220	45.8 Wh	UN3481 Lithium ion batteries contained in equipment
1868	Surface Laptop 3 13.5" Metal	6	1	0.220	45.8 Wh	UN3481 Lithium ion batteries contained in equipment
1872	Surface Laptop 3 15" Intel Core	6	1	0.220	45.8 Wh	UN3481 Lithium ion batteries contained in equipment
1873	Surface Laptop 3 15" AMD Ryzen	6	1	0.220	45.8 Wh	UN3481 Lithium ion batteries contained in equipment
1876	Surface Pro X	4	1	0.175	38.2 Wh	UN3481 Lithium ion batteries contained in equipment
1881	Xbox Dev Kit (Series X)	1	1	0.003	0.07 g	UN3091 Lithium metal batteries contained in equipment
1883	Xbox Test Kit (Series S)	1	1	0.003	0.69 Wh	UN3091 Lithium metal batteries contained in equipment
1899	Surface Book 3 i7 15" Top	2	1	0.0965	23.2 Wh	UN3481 Lithium ion batteries contained in equipment
1900	Surface Book 3 i5 & i7 13.5" Top	2	1	0.088	18 Wh	UN3481 Lithium ion batteries contained in equipment
1901	Surface Go 2 Surface Go 3	2	1	0.120	26.8 Wh	UN3481 Lithium ion batteries contained in equipment
1907	Surface Book 3 GPU 15" Base	6	1	0.250	62.2 Wh	UN3481 Lithium ion batteries contained in equipment
1908	Surface Book 3 Non-GPU 13.5" Base	4	1	0.235	54.8 Wh	UN3481 Lithium ion batteries contained in equipment
1909	Surface Book 3 GPU 13.5" Base	6	1	0.236	57.3 Wh	UN3481 Lithium ion batteries contained in equipment
1916	Surface Earbuds Charging Case <i>See also 1852, 1938</i>	1	1	0.01	1.1 Wh	UN3481 Lithium ion batteries contained in equipment
1919	Surface Headphones 2 Surface Headphones 2+	1	1	0.0104	2.14 Wh	UN3481 Lithium ion batteries contained in equipment
1926	Surface Go 2 w/ NFC Surface Go 3	2	1	0.120	26.8 Wh	UN3481 Lithium ion batteries contained in equipment
1927	Surface Go 2 LTE	2	1	0.120	26.8 Wh	UN3481 Lithium ion batteries contained in equipment
1930	Surface Duo	1	2	0.044 0.014	10.7 Wh 2.8 Wh	UN3481 Lithium ion batteries contained in equipment
1934	Surface Hub 2S 85" Surface Hub 3 85"	1	1	0.0032	0.07 g	UN3091 Lithium metal batteries contained in equipment
1938	Surface Earbuds (Left) <i>See also 1852, 1916</i>	1	1	0.0016	0.222 Wh	UN3481 Lithium ion batteries contained in equipment
1943	Surface Laptop Go	4	1	0.185	39.7 Wh	UN3481 Lithium ion batteries contained in equipment

## Product Data Sheet

Model Number	Description	Cells per Battery	Batteries per Product	Battery Weight (kg)	Rating (Wh) Or Lithium Content (g)	UNID & Proper Shipping Name
1944	Xbox Wireless Headset	1	1	0.016	3.77 Wh	UN3481 Lithium ion batteries contained in equipment
1950	Surface Laptop 4 13.5" Fabric, Intel Core	6	1	0.220	45.8 Wh	UN3481 Lithium ion batteries contained in equipment
1951	Surface Laptop 4 13.5" Metal, Intel Core Surface Laptop 5 13.5" Fabric, Intel Core	6	1	0.220	45.8 Wh	UN3481 Lithium ion batteries contained in equipment
1953	Surface Laptop 4 15" Metal, AMD Ryzen	6	1	0.220	45.8 Wh	UN3481 Lithium ion batteries contained in equipment
1954	Microsoft Designer Compact Keyboard	1	4	0.0029	0.7 g	UN3091 Lithium metal batteries contained in equipment
1958	Surface Laptop 4 13.5" Fabric, AMD Ryzen	6	1	0.220	45.8 Wh	UN3481 Lithium ion batteries contained in equipment
1959	Surface Laptop 4 13.5" Metal, AMD Ryzen	6	1	0.220	45.8 Wh	UN3481 Lithium ion batteries contained in equipment
1960	Surface Pro 7+	4	1	0.220	48.9 Wh	UN3481 Lithium ion batteries contained in equipment
1961	Surface Pro 7+ with LTE Advanced	4	1	0.220	48.9 Wh	UN3481 Lithium ion batteries contained in equipment
1962	Surface Slim Pen 2	1	1	0.0015	0.164 Wh	UN3481 Lithium ion batteries contained in equipment
1964	Surface Laptop Studio	6	1	0.235	56.3 Wh	UN3481 Lithium ion batteries contained in equipment
1968	Surface Duo 2	1	2	0.055 0.015	13.96 Wh 2.74 Wh	UN3481 Lithium ion batteries contained in equipment
1969	Microsoft Number Pad	1	1	0.0029	0.7 g	UN3091 Lithium metal batteries contained in equipment
1979	Surface Laptop 4 15" Metal, Intel Core Surface Laptop 5 15" Metal, Intel Core	6	1	0.220	45.8 Wh	UN3481 Lithium ion batteries contained in equipment
1982	Surface Pro 8 LTE	3	1	0.213	50.2 Wh	UN3481 Lithium ion batteries contained in equipment
1983	Surface Pro 8 Wifi	3	1	0.213	50.2 Wh	UN3481 Lithium ion batteries contained in equipment
1995	Surface Duo 2	1	2	0.055 0.015	13.96 Wh 2.74 Wh	UN3481 Lithium ion batteries contained in equipment
1996	Surface Pro 9 5G	4	1	0.195	46.52 Wh	UN3481 Lithium ion batteries contained in equipment
1997	Surface Pro 9 5G	4	1	0.195	46.52 Wh	UN3481 Lithium ion batteries contained in equipment
1998	Microsoft Modern Wireless Headset	1	1	0.0104	2.14 Wh	UN3481 Lithium ion batteries contained in equipment
2010	Surface Pro X	4	1	0.175	38.2 Wh	UN3481 Lithium ion batteries contained in equipment
2013	Surface Laptop Go 2 Surface Laptop Go 3	4	1	0.185	39.7 Wh	UN3481 Lithium ion batteries contained in equipment
2016	Surface Laptop SE	2	1	0.190	33.9 Wh	UN3481 Lithium ion batteries contained in equipment
2022	Surface Go 3 LTE	2	1	0.120	26.8 Wh	UN3481 Lithium ion batteries contained in equipment
2023	Microsoft Presenter+	1	1	0.004	0.754 Wh	UN3481 Lithium ion batteries contained in equipment
2028	Surface Studio 2+	1	1	0.0032	0.07 g	UN3091 Lithium metal batteries contained in equipment
2029	Surface Laptop Studio 2	6	1	0.235	56.3 Wh	UN3481 Lithium ion batteries contained in equipment
2030	Microsoft Adaptive Mouse	1	1	0.0104	2.14 Wh	UN3481 Lithium ion batteries contained in equipment

# Product Data Sheet

Model Number	Description	Cells per Battery	Batteries per Product	Battery Weight (kg)	Rating (Wh) Or Lithium Content (g)	UNID & Proper Shipping Name
2031	Microsoft Adaptive Hub	1	1	0.0104	2.14 Wh	UN3481 Lithium ion batteries contained in equipment
2032	Microsoft Adaptive Button	1	1	0.0104	2.14 Wh	UN3481 Lithium ion batteries contained in equipment
2033	Surface Laptop 6	6	1	0.220	45.8 Wh	UN3481 Lithium ion batteries contained in equipment
2035	Surface Laptop 6	6	1	0.220	45.8 Wh	UN3481 Lithium ion batteries contained in equipment
2036	Surface Laptop 7th Edition	6	1	0.222	52.33 Wh	UN3481 Lithium ion batteries contained in equipment
2037	Surface Laptop 7th Edition	6	1	0.2695	63.84 Wh	UN3481 Lithium ion batteries contained in equipment
2038	Surface Pro 9 Wifi	4	1	0.195	46.52 Wh	UN3481 Lithium ion batteries contained in equipment
2043	Windows Dev Kit 2023	1	1	0.0008	0.0075 g	UN3091 Lithium metal batteries contained in equipment
2067	Surface Go 4	2	1	0.122	27.76 Wh	UN3481 Lithium ion batteries contained in equipment
2076	Surface Pro 11th Edition	4	1	0.195	46.52 Wh	UN3481 Lithium ion batteries contained in equipment
		4	1	0.208	51.48 Wh	UN3481 Lithium ion batteries contained in equipment
2077	Surface Pro 10 Surface Pro 11th Edition	4	1	0.195	46.52 Wh	UN3481 Lithium ion batteries contained in equipment
		4	1	0.208	51.48 Wh	UN3481 Lithium ion batteries contained in equipment
2078	Surface Pro 10 Surface Pro 11th Edition	4	1	0.195	46.52 Wh	UN3481 Lithium ion batteries contained in equipment
		4	1	0.208	51.48 Wh	UN3481 Lithium ion batteries contained in equipment
2085	Surface Pro 11th Edition	4	1	0.195	46.52 Wh	UN3481 Lithium ion batteries contained in equipment
		4	1	0.208	51.48 Wh	UN3481 Lithium ion batteries contained in equipment
2079	Surface Pro 10	4	1	0.195	46.52 Wh	UN3481 Lithium ion batteries contained in equipment
2082	Surface Pro Flex Keyboard	1	1	0.013	1.862 Wh	UN3481 Lithium ion batteries contained in equipment
2089	Xbox Dev Kit (Series X)	1	1	0.003	0.07 g	UN3091 Lithium metal batteries contained in equipment
WH01	LifeChat ZX-6000	1	1	0.004	1.30 Wh	UN3481 Lithium ion batteries contained in equipment

## **Section XV - 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.

## **Section XVI - Other Information**

Preparation Date: September 26, 2024

Prepared by: Ashley Liao

Revision: 2024C

**Disclaimer:** The batteries referenced herein are considered exempt articles and are not subject to the OSHA Hazard Communication Standard; therefore, a SDS is not required. This sheet is being provided as a service to our customers.

The information and recommendations set forth are made in good faith and believed to be accurate as of the date of preparation. **MICROSOFT** makes no warranty, expressed or implied, regarding the accuracy of this data or the results to be obtained from the use thereto.