

## PRODUCT SAFETY DATA SHEET

Product Name: Lithium-Ion Battery Packs (less than or equal to 100 Watt Hours)

### \*\*\* Section 1 – Identification \*\*\*

**Product Identifier:** Detachable Battery Packs

#### BLACK+DECKER

(7 Volt) - VPX0111  
(10.8 Volt) - BL1110, BL1310, BL1510, BL1512, BK1512  
(12 Volt Max) - LB12, LBX12, LBXR12, LBXR1512, BCB001  
(14.4 Volt) - A1114L, A1514L, BL1114, BL1314, BL1514  
(16 Volt Max) - LB16, LBX16, LBXR16  
(18 Volt) - A1518L, A1118L, LB018, BL1118, BL1318, BL1518, BL1518ST, BL2018, BL2018ST, BL4018  
(20 Volt Max) - LB20, LBX20, LBXR20, LBXR2020, LB2X4020, LBXR20BT  
(36 Volt) - BL1336, BL1536, BL2036, BL20362  
(40 Volt Max) - LBX36, LBXR36, LBX1540, LBXR2040, LBX2540, LBXR2540  
(18 Volt/54 Volt) - BL1554  
(20V Max/60 Volt Max) - LBX1560

#### BOSTITCH

(3.6 Volt) - 9B12070R, 9B12072R  
(12/10.8 Volt) - 9R201436, 9R201498, 9R209111, 9R209775  
(18 Volt) - BCB182, BCB183, BTCB182, BTCB183, BTCN183, BTCN182  
(20 Volt) - BCB203, BCB204

#### DEWALT

(8 Volt) - DCB080  
(10.8 Volt) - DCB121, DCB123, DCB125, DCB127  
(12 Volt Max) - DCB120, DCB127  
(14.4 Volt) - DC9140, DE9140, DE9141, DC9144, DCB140, DCB141, DCB142, DCB143, DCB144, DCB145  
(18 Volt) - DC9180, DE9180, DC9181, DE9181, DC9182, DE9182, DCB180, DCB181, DCB182, DCB183, DCB183B, DCB184, DCB184B, DCB185, DCB187  
(20 Volt Max) - DCB200, DCB201, DCB203, DCB203BT, DCB204, DCB204BT, DCB205, DCB205BT, DCB207, DCB230  
(18 Volt/54 Volt) - DCB546 with Transport Cap. Battery pack is considered 3 batteries each having a Whr rating of 36 Whr with Transport Cap in place,  
DCB547 with Transport Cap. Battery pack is considered 3 batteries each having a Whr rating of 54 Whr with Transport Cap in place  
(20Volt Max/60Volt Max) - DCB606 with Transport Cap. Battery pack is considered 3 batteries each having a Whr rating of 40 Whr with Transport Cap in place,  
DCB609 with Transport Cap. Battery pack is considered 3 batteries each having a Whr rating of 60 Whr with Transport Cap in place  
(28 Volt) - DC9280, DE9280  
(36 Volt) - DC9360, DE9360, DCB361

#### DuBuis

(18 Volt) - AB18LI300, AB18LI150, AB18LI200S, AB18LI400S, AB18LI500S

#### Facom

(10.8 Volt) - CL3.BA1018, CL3.BA1015, CL3.BA1020  
(18 Volt) - CL3.BA1815, CL3.BA1830, CL3.BA1820, CL3.BA1840, CL3.BA1850

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### MAC Tools

(12 Volt Max) - MB120, MB127, MBR127

(20 Volt Max) - MB200, MB201, MB203, MB204, MB205, MBR203, MBR204,  
MBR205

(10.8V) - MB120-UK, MB127-UK, MBR127-UK

(18 Volt) - MB200-UK, MB201-UK, MB203-UK, MB204-UK, MB205-UK, MBR183-  
UK, MBR184-UK

### POP

(18 Volt) - EBC180, EBC181, EBC182, EBC183, EBC184

### PORTER-CABLE

(12 Volt) - PC12BL, PC12BLX, PC12BLXLW

(18 Volt) - PC18BL, PC18BLX, PC18BLEX

(20 Volt Max) - PCC680L, PCC681L, PCC685L, PCC682L

### Sidchrome

(10.8 Volt) - SCMT90050, SCMT90053

(18 Volt) - SCMT90051, SCMT90052, SCMT90055, SCMT90056

### Stanley FatMax

(10.8 Volt) - FMC085L, FMC086L

(12 Volt Max) - FMC080L

(14.4 Volt Max) - FMC585L

(18/20 Volt) - FMC680L, FMC684L, FMC685L, FMC686L, FMC687L, FMC688L,  
FMC689L

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## \*\*\* Section 2 - Hazards Identification \*\*\*

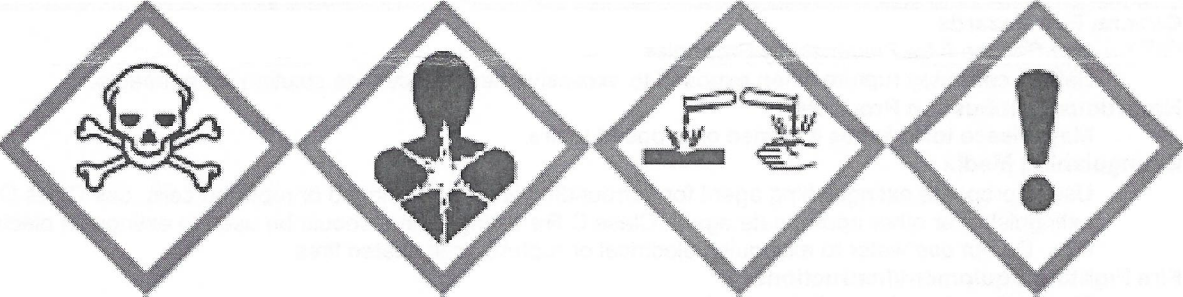
### Classification

These batteries are not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). The batteries referenced in this document are considered "Articles," not "Materials," as defined by the Occupational Safety and Health Administration's Hazard Communication Standard, and as such are exempted from the requirements to publish MSDS sheets per the Code of Federal Regulations 29 CFR 1910.1200 (b)(6)(v). The hazards indicated below cover the abnormal situation where a battery ruptures.

Acute Toxicity – Oral	Category 4
Acute Toxicity – Dermal	Category 4
Acute Toxicity – Inhalation (Vapors)	Category 3
Acute Toxicity – Inhalation (Dusts/Mists)	Category 2
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1

### GHS Label elements, including precautionary statements

#### Emergency Overview

<b>Signal Word</b>	<b>Danger</b>	
<b>Hazard Statements</b> Harmful if swallowed Harmful in contact with skin Fatal if inhaled Causes severe skin burns and eye damage May cause an allergic skin reaction May cause cancer May damage fertility or the unborn child May cause respiratory irritation Causes damage to organs through prolonged or repeated exposure		
		
This product is an article (battery) which contains chemical substances. Intended use of the product should not result in exposure to the chemical substances. In case of rupture, the above hazards exist.		
<b>Appearance</b> Solid	<b>Physical state</b> Solid	<b>Odor</b> None



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## \*\*\* Section 6 - Accidental Release Measures \*\*\*

### Containment Procedures

Stop the flow of material, if this is without risk.

### Clean-Up Procedures

Absorb spill with inert material. Shovel material into appropriate container for disposal. Clean spill area with detergent and water; collect wash water for proper disposal.

### Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

### Special Procedures

Avoid skin contact with the spilled material.

## \*\*\* Section 7 - Handling and Storage \*\*\*

### Handling Procedures

Avoid damaging or rupturing battery.

### Storage Procedures

Store in a dry location at room temperature. Avoid extreme heat or fire. Keep out of reach of children.

## \*\*\* Section 8 - Exposure Controls / Personal Protection \*\*\*

### A: Component Exposure Limits

ACGIH, OSHA, and NIOSH have not developed exposure limits for any of this product's components.

### Engineering Controls

Not necessary under normal product use conditions.

### PERSONAL PROTECTIVE EQUIPMENT

#### Personal Protective Equipment: Eyes/Face

Not necessary under normal product use conditions. Wear safety glasses if handling a damaged battery.

#### Personal Protective Equipment: Skin

Not necessary under normal product use conditions. Wear neoprene or natural rubber gloves when handling a damaged battery.

#### Personal Protective Equipment: Respiratory

Not necessary under normal product use conditions.

#### Personal Protective Equipment: General

Eyewash fountains and emergency showers are required.

## \*\*\* Section 9 - Physical and Chemical Properties \*\*\*

<b>Appearance:</b>	Various shaped battery	<b>Odor:</b>	None
<b>Physical State:</b>	Solid	<b>pH:</b>	NA
<b>Vapor Pressure:</b>	NA	<b>Vapor Density:</b>	NA
<b>Boiling Point:</b>	NA	<b>Melting Point:</b>	NA
<b>Solubility (H2O):</b>	Insoluble	<b>Specific Gravity:</b>	NA
<b>Evaporation Rate:</b>	NA	<b>VOC:</b>	NA
<b>Octanol/H2O Coeff.:</b>	NA	<b>Flash Point:</b>	NA
<b>Flash Point Method:</b>	NA	<b>Upper Flammability Limit (UFL):</b>	NA
<b>Lower Flammability Limit (LFL):</b>	NA	<b>Burning Rate:</b>	NA
<b>Auto Ignition:</b>	NA		

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### \*\*\* Section 14 – Transport Information \*\*\*

Lithium-ion batteries comply with all applicable shipping regulations as prescribed by industry and legal standards which include UN Recommendations on the Transport of Dangerous Goods; the 58<sup>th</sup> Edition of the IATA Dangerous Goods Regulations and US DOT requirements. Cells and Batteries have been tested to section 38.3 of the UN Recommendations on the Transport of Dangerous Goods Manual of Tests and Criteria. All of the batteries listed in this Safety Data Sheet are less than or equal to 100 Whrs; therefore, air shipment of up to 2 batteries without equipment in a package can be shipped as an “excepted” quantity and does not require being shipped as a fully regulated Class 9 Hazardous Material. If more than 2 batteries without equipment are being shipped in one package, using air transportation, then the package is considered a fully regulated shipment and must meet the more stringent documentation, marking, and labeling requirements. Effective April 1<sup>st</sup>, 2016, all air shipments of lithium ion batteries without equipment require the state of charge of the battery to be no greater than 30% of the rated design capacity and are banned from shipment on passenger aircraft (Cargo Aircraft Only).

#### Batteries Alone

UN3480, Lithium Ion Batteries

Air Shipments (IATA) – Packing Instruction 965 (Section IB for greater than 2 batteries per package, Section II for less than or equal to 2 batteries per package)

Sea Shipments (IMO-IMDG) – Special Provision 188

Europe Road Transportation (ADR) – Special Provision 188

US Road Transportation (DOT) – 49 CFR 173.185(c)

#### Batteries with or in Equipment

UN3481, Lithium Ion Batteries packed with equipment OR Lithium Ion Batteries contained in equipment.

Air Shipments (IATA) – Packing Instruction 966 or 967, Section II

Sea Shipments (IMO-IMDG) – Special Provision 188

Europe Road Transportation (ADR) – Special Provision 188

US Road Transportation (DOT) – 49 CFR 173.185(c)