SAFETY DATA SHEET

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name WA3537 32V Worx replacement battery

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use LITHIUM ION BATTERIES

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name Positec(Macao Commercial Offshore) Limited

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Emergency telephone number

2. HAZARDS IDENTIFICATION

Classification

This product is an article which is a sealed battery and as such does not require an MSDS per the OSHA hazard communication standard unless ruptured. The hazards indicated are for a ruptured battery.

Acute toxicity - Oral	Category 4
Skin sensitization	Category 1
Carcinogenicity	Category 1A



Specific target organ toxicity (repeated exposure)

Category 1

GHS Label elements, including precautionary statements

Emergency Overview

Signal word

Danger

Hazard Statements

Harmful if swallowed May cause an allergic skin reaction May cause cancer



Appearance Black

Physical state Solid

Odor None

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Specific treatment (see supplemental first aid instructions on this label)

Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable



Unknown Toxicity

33.8 % of the mixture consists of ingredient(s) of unknown toxicity

Other information

Causes mild skin irritation

Very toxic to aquatic life with long lasting effects

Repeated or prolonged skin contact may cause allergic reactions with susceptible persons

Interactions with Other Chemicals

Use of alcoholic beverages may enhance toxic effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

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Chemical Name	CAS No	Weight-%	Trade Secret
Supplier Trade Secret	Proprietary	7 - 13	*
Supplier Trade Secret	Proprietary	1 - 5	*
Supplier Trade Secret	Proprietary	0.1 - 1	*

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

First aid measures

General Advice First aid is upon rupture of sealed battery.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a

physician.

Skin contactWash skin with soap and water. In the case of skin irritation or allergic reactions see a

physician. May cause an allergic skin reaction.

Inhalation Remove to fresh air. If symptoms persist, call a physician.

Ingestion Do NOT induce vomiting. Rinse mouth. Rinse mouth immediately and drink plenty of water.

Never give anything by mouth to an unconscious person. Call a physician.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and

Effects

Itching. Coughing and/ or wheezing.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically. May cause sensitization in susceptible persons.



Page 3/11

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Product is or contains a sensitizer. May cause sensitization by skin contact.

Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact No.

Sensitivity to Static Discharge No.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes. Ensure adequate ventilation. Use personal protective equipment

as required. Evacuate personnel to safe areas.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

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Page 4/11

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off

contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children.

Incompatible ProductsNone known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Supplier Trade Secret	TWA: 0.2 mg/m³ fume TWA: 1	TWA: 0.1 mg/m ³ fume	IDLH: 100 mg/m3 dust, fume and
	mg/m³ Cu dust and mist	TWA: 1 mg/m ³ dust and mist	mist
		(vacated) TWA: 0.1 mg/m ³ Cu	TWA: 1 mg/m ³ dust and mist
		dust, fume, mist	TWA: 0.1 mg/m ³ fume
Supplier Trade Secret	TWA: 1 mg/m³ respirable fraction	TWA: 15 mg/m ³ total dust	TWA: 10 mg/m ³ total dust
		TWA: 5 mg/m³ respirable fraction	TWA: 5 mg/m ³ respirable dust
		(vacated) TWA: 15 mg/m³ total	
		dust	
		(vacated) TWA: 5 mg/m ³	
		respirable fraction (vacated)	
		TWA: 5 mg/m ³ Al Aluminum	

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992) See section 15 for national exposure control parameters

Appropriate engineering controls

Engineering Measures Showers

Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves and protective clothing.

exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or

smoke when using this product. Take off contaminated clothing and wash before reuse.



Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical stateSolidAppearanceBlackOdorNone

Color No information available Odor Threshold No information available

Property Values Remarks Method

No data available pН None known Melting / freezing point No data available None known Boiling point / boiling range No data available None known **Flash Point** No data available None known **Evaporation Rate** No data available None known Flammability (solid, gas) No data available None known

Flammability Limit in Air

Upper flammability limitNo data availableLower flammability limitNo data available

Vapor pressure No data available None known Vapor density No data available None known **Specific Gravity** No data available None known Water Solubility Virtually insoluble None known Solubility in other solvents No data available None known Partition coefficient: n-octanol/waterNo data available None known **Autoignition temperature** No data available None known **Decomposition temperature** No data available None known Kinematic viscosity No data available None known **Dynamic viscosity** No data available None known

Explosive properties

Oxidizing properties

No data available
No data available

Other Information

Softening Point
VOC Content (%)
Particle Size
No data available
No data available
No data available

Particle Size Distribution

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

None known based on information supplied.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

Carbon oxides.

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Page 6/11

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

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Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available. May be harmful if swallowed.

(based on components).

Component Information

Information on toxicological effects

Symptoms Itching. Rashes. Hives.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization May cause sensitization in susceptible persons. May cause sensitization by skin contact.

Mutagenic Effects No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

ACGIH (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen
A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposureCauses damage to organs through prolonged or repeated exposure. Based on

classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from

chronic or repeated exposure. (STOT RE).

Chronic Toxicity Contains a known or suspected carcinogen. Avoid repeated exposure. Prolonged exposure

may cause chronic effects. May cause adverse effects on the bone marrow and

blood-forming system. May cause adverse liver effects.



Target Organ Effects Skin. Respiratory system. Eyes. Gastrointestinal tract (GI). Blood. Central Nervous System

(CNS). Central Vascular System (CVS). Kidney. Liver. Lungs. Nasal cavities.

Cardiovascular system. Heart.

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)
1,875.00 mg/kg
ATEmix (inhalation-gas)
29,880.00 ppm (4 hr)
ATEmix (inhalation-dust/mist)
9.89 mg/l
ATEmix (inhalation-vapor)
73.00 ATEmix

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Supplier Trade Secret	subcapitata) 72h EC50: 0.0426 - 0.0535 mg/L (Pseudokirchneriella subcapitata)	96h LC50: 0.0068 - 0.0156 mg/L (Pimephales promelas) 96h LC50: = 0.112 mg/L (Poecilia reticulata) 96h LC50: = 0.3 mg/L (Cyprinus carpio) 96h LC50: = 0.8 mg/L (Cyprinus carpio) 96h LC50: = 1.25 mg/L (Lepomis macrochirus) 96h LC50: = 0.052 mg/L (Oncorhynchus mykiss) 96h LC50: = 0.2 mg/L (Pimephales promelas) 96h LC50: < 0.3 mg/L (Pimephales promelas)		48h EC50: = 0.03 mg/L

Persistence and Degradability

No information available.

Bioaccumulation

Other adverse effects

No information available.

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Page 8/11

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR

261).

Contaminated Packaging Dispose of contents/containers in accordance with local regulations.

US EPA Waste Number D011

California Hazardous Waste Codes 141

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Supplier Trade Secret	Toxic
Supplier Trade Secret	Ignitable powder

14. TRANSPORT INFORMATION

Note: The transportation of primary lithium cells and batteries is regulated by the International

Civil Aviation Organization, International Air Transport Association, International Maritime Dangerous Goods Code and the US Department of Transportation. The batteries must meet the following criteria for shipment: 1. Air shipments must meet the requirements listed in Special Provision A45 of the International Air Transport Association Dangerous Goods Regulations. 2. Meet the requirements for the US Department of Transportation listed in 49 CFR 173.185. 3. The transport of primary lithium batteries is prohibited aboard passenger aircraft. Refer to the Federal Register December 15, 2004 (Hazardous

Materials; Prohibited on the Transportation of Primary Lithium Batteries and Cells Aboard Passenger Aircraft; Final Rule)

Lithium batteries shipped as "Lithium batteries", "Lithium batteries packed with equipment", or "Lithium batteries contained in equipment" may not be classified as "Dangerous Goods" when shipped in accordance with "special provision A45 of IATA-DGR" or "special provision"

188 of IMO-IMDG Code"

DOTNOT REGULATEDProper Shipping NameNON-REGULATED

Hazard Class N/A Emergency Response Guide 147

Number

TDG

Not regulated

MEX Not regulated

ICAO Not regulated

IATA Not regulated
Proper Shipping Name NON REGULATED

Hazard Class N/A

IMDG/IMO Not regulated

Hazard Class N/A

EmS-No. F-A, S-I

RID Not regulated

ADR Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies

DSL All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Supplier Trade Secret -		7 - 13	1.0
Supplier Trade Secret -		1 - 5	1.0

SARA 311/312 Hazard Categories

Acute Health HazardYesChronic Health HazardYesFire HazardNoSudden release of pressure hazardNoReactive HazardNo

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Supplier Trade Secret		X	Х	

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Supplier Trade Secret	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65	
Supplier Trade Secret -	Carcinogen	
Supplier Trade Secret -	Carcinogen	

U.S. State Right-to-Know Regulations



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Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Supplier Trade Secret	Х	Х	Χ	Х	
Supplier Trade Secret			Х		
Supplier Trade Secret			Х	Х	Х
Supplier Trade Secret	Χ	Х	Х	Х	Х
Supplier Trade Secret			X	Х	X
Supplier Trade Secret	Χ	X	X		
Supplier Trade Secret	Х	Х	Х	Х	Х

International Regulations

Mexico

National occupational exposure limits

Component	Carcinogen Status	Exposure Limits
Supplier Trade Secret		Mexico: TWA= 1 mg/m ³
(7-13)		Mexico: TWA= 0.2 mg/m ³
		Mexico: STEL= 2 mg/m ³
Supplier Trade Secret		Mexico: TWA= 10 mg/m ³
(1-5)		

Mexico - Occupational Exposure Limits - Carcinogens

Canada

WHMIS Hazard Class

Not determined

16. OTHER INFORMATION

NFPA Health Hazards 1 Flammability 0 Instability 0 Physical and Chemical Hazards - HMIS Health Hazards 2 * Flammability 0 Physical Hazard 0 Personal Protection

Chronic Hazard Star Legend * = Chronic Health Hazard

Prepared ByProduct Stewardship
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Revision Note No information available

Disclaimer

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End of Safety Data Sheet

