

SAFETY DATA SHEET

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NGHS / English



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1. IDENTIFICATION

Product identifier

Product Name Pulverize Weed Killer

Other means of identification

Product Code(s) 1425965

Recommended use of the chemical and restrictions on use

Recommended Use Weed Killer

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Identification Messinas

Address 55 Willow St
Washington
NJ
07882
US

Telephone Phone:908-320-7009
Fax:908-320-7088

E-mail james@messinas.com

Emergency telephone number

Company Emergency Phone Number 908-320-7009

2. HAZARDS IDENTIFICATION

Classification

Skin sensitization	Category 1
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Appearance Reddish brown

Physical state Liquid

Odor Slight

GHS Label elements, including precautionary statements

Warning

Hazard statements

May cause an allergic skin reaction



Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray
 Contaminated work clothing must not be allowed out of the workplace
 Wear protective gloves

Precautionary Statements - Response

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

Skin

IF ON SKIN: Wash with plenty of water and soap
 If skin irritation or rash occurs: Get medical advice/attention
 Wash contaminated clothing before reuse

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

Unknown acute toxicity 1.5 % of the mixture consists of ingredient(s) of unknown toxicity
 1.5 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
 1.5 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
 1.5 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
 1.5 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
 1.5 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Third Party Formulation (TP # 1398922)	-	0 - 10%	-	-

4. FIRST AID MEASURES

First aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

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	None.
Sensitivity to Static Discharge	None.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

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 Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled

containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. 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 Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH	
Third Party Formulation (TP # 1398922)	TWA: 1 mg/m ³ Fe	(vacated) TWA: 1 mg/m ³ Fe	TWA: 1 mg/m ³ Fe	
Chemical name	Alberta	British Columbia	Ontario TWAEV	Quebec
Third Party Formulation (TP # 1398922)	TWA: 1 mg/m ³	TWA: 1 mg/m ³ STEL: 2 mg/m ³	TWA: 1 mg/m ³	TWA: 1.0 mg/m ³

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 controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Hand protection

Wear suitable gloves.

Skin and body protection

Wear suitable protective clothing.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical state	Liquid
Appearance	Reddish brown
Odor	Slight
Color	No information available
Odor Threshold	No data available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH	5		
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		None known	
Upper flammability limit	No data available		
Lower flammability limit	No data available		
Vapor pressure	No data available	None known	
Vapor density	No data available	None known	
Relative density	1.02		
Water Solubility	Soluble (> .?%)		
Solubility(ies)	No data available	None known	
Partition coefficient: n-octanol/water	n/a		
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	

Other Information

Explosive properties	No information available
Oxidizing properties	No information available
Softening Point	No information available
Molecular Weight	No information available
VOC Content (%)	No information available
Liquid Density	No information available
Bulk Density	No information available
Particle Size	No information available
Particle Size Distribution	No information available

10. STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under normal 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.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

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. May cause sensitization by skin contact. (based on components). Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
Ingestion	Specific test data for the substance or mixture is not available.

Information on toxicological effects

Symptoms Itching. Rashes. Hives.

Numerical measures of toxicity

Acute Toxicity

Unknown acute toxicity 1.5 % of the mixture consists of ingredient(s) of unknown toxicity
 1.5 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
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Component Information No information available

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

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	May cause sensitization by skin contact.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity The environmental impact of this product has not been fully investigated.

Persistence and Degradability	No information available.
Bioaccumulation	There is no data for this product.
Mobility	No information available.
Other adverse effects	No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.
California Waste Codes	232

14. TRANSPORT INFORMATION

<u>DOT</u>	NOT REGULATED
Proper Shipping Name	NON-REGULATED
Hazard Class	N/A
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO</u>	Not regulated
<u>IATA</u>	Not regulated
Proper Shipping Name	NON REGULATED
Hazard Class	N/A
<u>IMDG/IMO</u>	Not regulated
Hazard Class	N/A
<u>RID</u>	Not regulated
<u>ADR</u>	Not regulated
<u>ADN</u>	Not regulated

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable



Export Notification requirements Not applicable

International Inventories

TSCA	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AICS	Contact supplier for inventory compliance status.

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances above threshold limits that are regulated by state right-to-know.

EPA Pesticide Registration Number 67702-27-82165

16. OTHER INFORMATION



NFPA	Health hazards 2	Flammability 0	Instability 0	Physical and Chemical Properties -
HMIS	Health hazards 2	Flammability 0	Physical hazards 0	Personal Protection X

Prepared By Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

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Revision Note No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet



Zhejiang Yonggao Battery Co., Ltd.

浙江永高电池股份有限公司

MATERIAL SAFETY DATA SHEET

Printing date: DEC 20, 2018

Reviewed on: DEC 20, 2018

Expiry date: DEC 31, 2019

SECTION 1 - Product and Company Identification

Product name: ALKALINE BATTERY

Chemical name: ALKALINE ZINC-MANGANESE DRY BATTERY

Chemical formula : Zn-MnO₂

Manufacturer/supplier: ZHEJIANG YONGGAO BATTERY CO., LTD.

ADD.: No. 199, Yonggao Road, South Lake Economic Zone, Jiaxing, Zhejiang, China.

Tel: 0573-83645979 Fax: 0573-83645980



SECTION 2 - Hazards Identification

General advice: The common known rules for handling of chemicals should be obeyed. These chemicals are contained in a sealed steel can. For consumer use, adequate hazard warnings are printed on both the package and the battery. Potential for exposure should not exist unless the battery leaks, is exposed to high temperatures or is mechanically or electrically abused. Concentrated potassium hydroxide contained is caustic. Anticipated potential leakage of potassium hydroxide is 2-20 ml, depending on battery size. Do not eat and drink batteries. Keep batteries away from small children.

Physical-Chemical Hazards: This preparation is not classified as dangerous according to the criteria of directive 99/45/EEC.

Hazards to man: If battery leaking, exposure to caustic ingredients may occur . Therefore, may cause sensitization by skin contract.

Hazards to environment: N.A..

SECTION 3- Information On Ingredients

Chemical name	LR20	LR14	LR6	LR03	6LR61	3LR12	4LR25	4LR25-2 4LR20-2	CAS NO.
AVERAGE WEIGHT	145.0 g	70.0 g	22.8 g	11.4 g	47.0 g	175g	650g	1300g	/
ZINC	17.4%	16.9%	16.2%	13.9%	15.45%	13.4%	15.53%	15.6%	7440-66-6
MANGANESE DIOXIDE	43.09%	41.97%	37.57%	34.31%	36.46%	35.6%	38.45%	38.8%	1313-13-9
CARBON	2.93%	2.65%	3.27%	2.95%	3.29%	2.75%	2.61%	2.78%	/
STEEL	22.07%	21.07%	20.75%	25.89%	24.80%	14.90%	22.91%	29.32%	/
BRASS	1.10%	1.43%	2.41%	4.56%	3.64%	1.03%	0.66%	1.01%	12597-71-6
PLASTIC	1.17%	1.57%	1.71%	1.75%	1.06%	9.74%	2.07%	1.1%	/
PAPER	0.625%	1.36%	0.92%	0.96%	1.21%	0.53%	6.01%	0.82%	/



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POTASSIUM HYDROXID	3.66%	4.36%	6.3%	5.6%	5.55%	6.36%	3.27%	3.28%	1310-58-3
WATER	7.03%	7.50%	9.56%	8.51%	5.24%	14.9%	6.27%	6.42%	/
ZINC OXIDE	0.53%	0.50%	0.49%	0.42%	0.45%	0.53%	0.47%	0.51%	1314-13-2
MERCURY	<1ppm	<1ppm	<1ppm	<1ppm	<1ppm	<1ppm	<1ppm	<1ppm	7439-97-6
CADMIUM	<5ppm	<5ppm	<5ppm	<5ppm	<5ppm	<5ppm	<5ppm	<5ppm	7440-43-9
LEAD	<10ppm	<10ppm	<10ppm	<10ppm	<10ppm	<10ppm	<1000 ppm	<1000 ppm	7439-92-1
OTHER	0.39%	0.69%	0.82%	1.15%	2.85%	0.26%	1.75%	0.36%	/

SECTION 4 First-Aid Measures

Inhalation: In case of excessive in halation due to leaking batteries remove to fresh air. Obtain medical advice.

Skin Contact: If exposed to a leaking battery, remove contaminated clothing. Wash exposed areas with plenty of water and soap. IF irritation occurs, consult a physician.

Eye contact: Not anticipated due to size of batteries. Choking may occur with the smaller size batteries. If exposed to a leaking battery, rinse mouth and surrounding areas with running water for at least 15minutes. Give plenty of water to drink. Do not induce vomiting. Obtain medical advice.

SECTION 5 - Fire Fighting Measures

Suitable extinguishing media: Carbon dioxide, foam, dry chemical powder.

Extinguishing media not to be used: Never use a direct water jet.

Exposure hazards from combustion products: In case of fire, carbon monoxide and other toxic organic substances will be generated. Do not inhale fumes and smoke.

Personal protective equipment:

Wear full protective clothing. Use self-contained breathing apparatus

SECTION 6 - Accidental Release Measures

Personal precautions: Notify safety personnel of large spills. Caustic potassium hydroxide may be released from leaking or ruptured batteries. Avoid eye or skin contact and in halation of vapors. Increase the ventilation. Wear protective clothing. Keep unprotected persons away.

Methods for cleaning up: Collect spilled material with an insert standard absorbent like sand or silica. Care for well-ventilated conditions. Recycle or dispose of the materials in an appropriate way.

Environmental precautions: Avoid discharge and penetration into sewerage systems, waterways, pits, and cellars.





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SECTION 7 - Handling and Storage

General handling: Obey the common known rules and precautions for handling with chemicals. Avoid mechanical and electrical abuse. Do not short battery or install incorrectly. Batteries may explode, pyrolyze or vent if disassembled. Crushed, recharged or exposed to high temperatures. Install batteries according to equipment instructions. Do not mix battery systems, such as alkaline and zinc-carbon. Replace all batteries in equipment at the same time. Do not carry batteries loose in pocket or bag. Do not remove battery labels.

Storage: Store product in well-filled, appropriate coated and tightly closed containers avoiding influence of oxygen/air, light and humidity, storage at room temperate.

SECTION 8 - Exposure Control/PPE

Exposition/Technical measures: Atmospheric vapor concentrations must be minimized by adequate ventilation.

Protection of hands, eyes and skin: None required under normal use conditions. When handling leaking batteries, use neoprene, rubber or nitrile gloves and wear safety glasses to protect hands, eyes and skin.

General safety and hygiene measures: use only as directed.

SECTION 9 Physical / Chemical Properties

Physical state: Stainless steel top battery Colour: Contents dark and gray in colour

Odour: N.A.

Melting point: N.A.

Boiling point: N.A.

Flash point: N.A.

Explosion limit: Not available

Ignition temperature: Not available

Vapor pressure: Not available

Specific gravity: N.A. *Solubility in water:* N.A.

Solubility in other solvents: N.A.

PH value: Not available

Partition coefficient: Not available

Viscosity: Not available



SECTION 10 - Stability and Reactivity

Thermal decomposition: batteries may burst and release hazardous decomposition products when exposed to fire.

Substances to avoid: Strong Oxidation agents.

Hazardous reactions: Contents incompatible with strong oxidizing agents.

Hazardous decomposition products: Thermal degradation may produce hazardous fumes of zinc and manganese; hydrogen gas; caustic vapors of



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potassium hydroxide and other toxic by-products.

SECTION 11 - Toxicological Information

Toxicity information is available on the battery ingredients noted in Section 2, but in general, N.A. to intact batteries. *Chronic health effects:* N.A.

SECTION 12 - Ecological Information

Toxicity:

Not data available.

Persistence and degradability:

Not data available.

Bioaccumulative potential:

No data available.

Mobility in soil:

No data available.

SECTION 13 - Disposal Consideration

Product: Dispose in accordance with appropriate regulations. If in doubt, contact your local government office concerned for information. Do not incinerate, since batteries may explode at excessive temperatures.

SECTION 14 - Transport Information

The batteries are securely packed and protected against short-circuits. The “dry battery” is non-dangerous goods according to IMO IMDG CODE and meets both sea and air shipping standards. These batteries are not regulated by international agencies as hazardous materials or dangerous goods when shipped. A shipping name of “zinc-manganese dry battery” may be used on all domestic and international bills of lading. The batteries are fulfill IATA DGR 59th Edition requirement.

RID/ADR:Non-Hazardous for Transport:This substance is considered to be non-hazardous for transport.

IATA:Non-Hazardous for Air Transport:Non-hazardous for air transport.

IMO:Non-Hazardous for Sea Transport:Non-hazardous for sea transport.

SECTION 15 - Regulatory Information

Symbol: N/A

EC labeling: None

Risk phrases: None

Safety phrases: None

Labeling is not required because alkaline batteries are classified as “articles” under the Dangerous Preparations Directive and as such are exempt from the requirements of the Directive.





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SECTION 16 - Other Information

The information on this Material Safety Data Sheet(MSDS) was obtained from current and reputable sources. However, the data is provided without any warranty; expressed or implied, regarding its correctness or accuracy. It is the user's responsibility to assume liability on loss, injury, damage, or expense resulting from improper use of this product. Any previous MSDS of this product mentioned above are hereby replaced with this new document. We urge you to make this information available as appropriate in your organization and to any others with whom you arrange to handle this product.

