

SAFETY DATA SHEET

Air Wick Freshmatic - Fresh Waters



HEALTH • HYGIENE • HOME

1. Product and company identification

Product name : Air Wick Freshmatic - Fresh Waters

Distributed by : Reckitt Benckiser LLC.
Morris Corporate Center IV
399 Interpace Parkway (P.O. Box 225)
Parsippany, New Jersey 07054-0225
+1 973 404 2600

Emergency telephone number (Medical) : 1-800-338-6167

Emergency telephone number (Transport) : 1-800-424-9300 (U.S. & Canada) CHEMTREC
Outside U.S. and Canada (North America), call Chemtrec:703-527-3887

Website: : <http://www.rbnainfo.com>

Product use : Air care, instant action (aerosol sprays)

This SDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is greater potential for large-scale or prolonged exposure, in accordance with the requirements of USDOL Occupational Safety and Health Administration.

This SDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulations, and shown in Section 15 of this SDS.

SDS # : D8179373 v4.0
Formulation #: : #0151361 v4.0

2. Hazards identification

Classification of the substance or mixture : FLAMMABLE AEROSOLS - Category 1
GASES UNDER PRESSURE - Liquefied gas
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 28.6%

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Extremely flammable aerosol.
Contains gas under pressure; may explode if heated.

Precautionary statements

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(D8179373) US

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2. Hazards identification

General	: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.
Response	: Not applicable.
Storage	: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.
Disposal	: Not applicable.
Supplemental label elements	: None known.
Hazards not otherwise classified	: None known.

3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated light	> 60	64742-47-8
propane	15 - 30	74-98-6
isopropyl myristate	1 - 2.5	110-27-0
butane	1 - 2.5	106-97-8
1,1-difluoroethane	1 - 2.5	75-37-6

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

Description of necessary first aid measures

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 10 minutes. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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4. First aid measures

- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
 irritation
 redness
- Inhalation** : Adverse symptoms may include the following:
 respiratory tract irritation
 coughing
- Skin contact** : No specific data.
Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

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5. Fire-fighting measures

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
halogenated compounds
carbonyl halides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
- Conditions for safe storage, including any incompatibilities** : Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Control

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated light	ACGIH TLV (United States, 4/2014). Absorbed through skin. TWA: 200 mg/m ³ , (as total hydrocarbon vapor) 8 hours.
propane	OSHA PEL 1989 (United States, 3/1989). TWA: 1000 ppm 8 hours. TWA: 1800 mg/m ³ 8 hours. NIOSH REL (United States, 10/2013). TWA: 1000 ppm 10 hours. TWA: 1800 mg/m ³ 10 hours. OSHA PEL (United States, 2/2013). TWA: 1000 ppm 8 hours. TWA: 1800 mg/m ³ 8 hours.
butane	OSHA PEL 1989 (United States, 3/1989). TWA: 800 ppm 8 hours. TWA: 1900 mg/m ³ 8 hours. NIOSH REL (United States, 10/2013). TWA: 800 ppm 10 hours. TWA: 1900 mg/m ³ 10 hours. ACGIH TLV (United States, 6/2013). STEL: 1000 ppm 15 minutes.
1,1-difluoroethane	AIHA WEEL (United States, 10/2011). TWA: 1000 ppm 8 hours.

- Appropriate engineering controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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8. Exposure controls/personal protection

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

9. Physical and chemical properties

Appearance

Physical state : Liquid. [Aerosol.]

Color : Not available.

Odor : Characteristic.

Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Boiling point : <34°C (<93.2°F)

Flash point : Closed cup: <0°C (<32°F)

Evaporation rate : Not available.

Flammability (solid, gas) : Not available.

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9. Physical and chemical properties

Lower and upper explosive (flammable) limits : Not available.

Vapor pressure : Not available.

Vapor density : Not available.

Relative density : 0.66 to 0.70

Solubility : Not available.

Partition coefficient: n-octanol/water : Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Not available.

Flow time (ISO 2431) : Not available.

Aerosol product

Type of aerosol : Spray

Heat of combustion : 40.62 kJ/g

10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame).

Incompatible materials : Do not mix with household chemicals.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
isopropyl myristate	LD50 Dermal	Rabbit	5 g/kg	-
butane	LC50 Inhalation Vapor	Rat	658000 mg/m ³	4 hours

Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
isopropyl myristate	Skin - Moderate irritant	Guinea pig	-	24 hours 100 milligrams	-
	Skin - Mild irritant	Human	-	72 hours 85 milligrams Intermittent	-
	Skin - Mild irritant	Rat	-	24 hours 100 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 426 milligrams	-
	Skin - Severe irritant	Rabbit	-	24 hours 100 milligrams	-

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11. Toxicological information

Conclusion/Summary

- Skin** : Based on available data, the classification criteria are not met.
- Eyes** : Based on available data, the classification criteria are not met.
- Respiratory** : Based on available data, the classification criteria are not met.

Sensitization

Not available.

Conclusion/Summary

- Skin** : Based on available data, the classification criteria are not met.
- Respiratory** : Based on available data, the classification criteria are not met.

Mutagenicity

Not available.

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

Carcinogenicity

Not available.

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

Reproductive toxicity

Not available.

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

Teratogenicity

Not available.

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name	Result
Distillates (petroleum), hydrotreated light	ASPIRATION HAZARD - Category 1

- Information on the likely routes of exposure** : Not available.

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

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11. Toxicological information

Eye contact	: Adverse symptoms may include the following: irritation redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: No specific data.
Ingestion	: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.

Long term exposure

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.

Potential chronic health effects

Not available.

Conclusion/Summary	: Based on available data, the classification criteria are not met.
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Dermal	244184.6 mg/kg

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Distillates (petroleum), hydrotreated light	Acute LC50 2200 µg/l Fresh water	Fish - Lepomis macrochirus	4 days

Persistence and degradability

Not available.

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12. Ecological information

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
propane	1.09	-	low
isopropyl myristate	7.71	2765	high
butane	2.89	-	low
1,1-difluoroethane	1.13	-	low

Mobility in soil

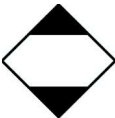
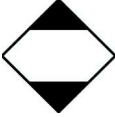

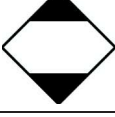

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN1950	Aerosols	2.1	-		Limited quantity
TDG Classification	UN1950	AEROSOLS	2.1	-		Limited quantity
Mexico Classification	UN1950	AEROSOLS	2.1	-		Limited quantity
IMDG Class	UN1950	AEROSOLS	2.1	-		Limited quantity
IATA-DGR Class	UN1950	Aerosols, flammable	2.1	-		See DG List

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14. Transport information

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

PG* : Packing group

15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) PAIR:** 2-(4-tert-butylbenzyl)propionaldehyde; decanal; 2-methylundecanal; 4-(4-hydroxy-4-methylpentyl)cyclohex-3-enecarbaldehyde; 7-hydroxycitronellal; α -hexylcinnamaldehyde; cinnamaldehyde

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): Not determined.

Clean Water Act (CWA) 307: toluene

Clean Water Act (CWA) 311: toluene

Clean Air Act (CAA) 112 regulated flammable substances: propane; 1, 1-difluoroethane; butane

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Fire hazard
Sudden release of pressure

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
propane	15 - 30	Yes.	Yes.	No.	No.	No.
isopropyl myristate	1 - 2.5	No.	No.	No.	Yes.	No.
butane	1 - 2.5	Yes.	Yes.	No.	No.	No.
1,1-difluoroethane	1 - 2.5	Yes.	Yes.	No.	No.	No.

State regulations

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15. Regulatory information

- Massachusetts** : The following components are listed: PROPANE; DIFLUOROETHANE; BUTANE
- New York** : None of the components are listed.
- New Jersey** : The following components are listed: PROPANE; 1,1-DIFLUOROETHANE; ETHANE, 1, 1-DIFLUORO-; BUTANE
- Pennsylvania** : The following components are listed: PROPANE; BUTANE

Canada

- WHMIS (Canada)** : Class B-2: Flammable liquid
Class B-5: Flammable aerosol.
Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists

- Canadian NPRI** : The following components are listed: Hydrotreated light distillate; Propane; Volatile organic compounds; Butane (all isomers)
- CEPA Toxic substances** : The following components are listed: Volatile organic compounds
- Canada inventory** : Not determined.

Label elements

- Signal word** : CAUTION
- Hazard statements** : Eye Irritant. May be harmful if inhaled. May cause allergic reactions in certain individuals. CONTENTS UNDER PRESSURE.
- Precautionary measures** : Keep out of the reach of children. DO NOT spray towards face or body. DO NOT get in eyes. Avoid contact with skin. CONTAINER MAY EXPLODE IF HEATED. DO NOT puncture or incinerate container. DO NOT expose to heat or store at temperatures above 120F (49C). DO NOT position near heat or electrical sources. DO NOT spray into open flames. DO NOT spray directly onto surfaces. In case of contact with surfaces, wipe immediately with damp cloth. Use in well-ventilated rooms away from sleeping areas. For adult use only. Product is not a toy. Contains propellants, petroleum solvent and fragrance.

NOTE TO PARENTS: Use only as directed. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. Help stop inhalant abuse. For more information visit www.inhalant.org.

- Recommendations** : People suffering from perfume sensitivity should be cautious when using this product. Air Fresheners do not replace good hygiene practices.

16. Other information

Hazardous Material Information System (U.S.A.) :

Health	*	2
Flammability		3
Physical hazards		0
Personal protection		B

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

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16. Other information

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :



NFPA (30B) aerosol Flammability Level 3

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Key to abbreviations :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

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Version : 4

Prepared by : Reckitt Benckiser LLC.
Product Safety Department
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Montvale, New Jersey 07646-1810 USA.
FAX: 201-476-7770

Revision comments : Revision to Section 3 Ingredient list.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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16. Other information



RB is a member of the CSPA Product Care Product Stewardship Program.

MATERIAL SAFETY DATA SHEET

In Accordance with Directive 2001/58/CE

Date: 01/01/2011

1. Chemical Product

MSDS Name: Alkaline Battery

Manufacturer: **SICHUAN CHANGHONG NEWENERGY TECHNOLOGY CO., LTD.**

Address: No.35, East Mianxing Road, High-Tech Park, 621000, Mianyang, Sichuan, China.

Tel: +86-816-2418674

Fax: +86-816-2410586

2. Composition /Information on Ingredients:

Chemical Nature: Chemical power source

CAS-No/EINECS NO.: Not applicable.

INCI CTFA-Description: Alkaline Zinc-Manganese Dry Battery

Tariff No.: "W" 85.06

IMPORTANT NOTE: The battery shall not be opened or burned. Exposure to the ingredients contained within or their combustion products could be harmful.

Chemical Name	Molecular Formula	CAS No.	Weight (%)
Zinc	Zn	7440-66-6	17~25
Manganese Dioxide	MnO ₂	1313-13-9	35~43
Graphite	C	7782-42-5	3~4
Potassium hydroxide (liquid)	KOH	1310-58-3	9~12.5
Copper	Cu	7440-50-8	1
Iron	Fe	7439-89-6	15~18
Water	H ₂ O	7732-18-5	10~12
Nylon	---	24937-16-4	2~3

* PNOR: Particulates not otherwise regulated

** PNOC: Particulates not otherwise classified

3. Hazards identifications

General: Alkaline battery --- The Common known rules for handing of chemical power source should be obeyed. Do not heat, recharge, disassemble the product or dispose of in fire.

Physical-Chemical Hazards: The chemical materials concluded in the Product is sealed up, thus being stable, safe and eco-friendly under common conditions, may not cause physical-chemical hazards.

Hazards to Human being: Disassemble the product without a professional basis, may cause leakage of the electrolyte and irritation to skin; or cause Hg/ Cd/ Pb (micro trace) poisoning.

Hazards to environment: Dispose the product without separate collection, may lead to pollution caused by Hg/ Cd/ Pb (micro trace), or the electrolyte of alkali solution.

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4. First-aid measures

Inhalation: Not applicable.

Skin Contact: Wash with clear water immediately once leakage happens and the inner liquid splashes onto skin.

Eye contact: Rinse eyes immediately with running water for at least ten minutes. Consult an ophthalmologist.

Ingestion: Rinse mouth with water; Give plenty of water to drink. Obtain medical advice.

5. Fire-fighting measures

Suitable extinguishing media: Carbon dioxide (CO₂), foam, dry chemical powder.

Extinguishing media not to be used: Never use a direct water jet, may pollute the water system.

Exposure hazards from combustion products: In case of fire, carbon monoxide or other toxic organic substances may be generated.

Do not inhale fumes and smoke.

Personal protective equipments: Wear full protective clothing. Use self contained breathing apparatus.

*** Remark: It can be extinguished by car extinguisher as well.**

6. Accidental release measures

Personal precautions: Wear protective clothing. Keep unprotected persons away.

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

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.

7. Handling and storage

General: Obey the common known rules and precautions for handling with chemical power sources.

Fire/Explosion protections: Explosion may happen if short-circuit; collect spilled material with an insert standard absorbent like sand or silica.

Storage: Store product in clean, cool and ventilated place with a temperature between 10°C and 30°C (no higher than 40°C in the ordinary course of events) and a relative humidity no higher than 65%; the storage time should not be too long; the batteries should be well-arranged, and do avoid sort-circuit caused by the contact of the positive and negative electrodes.

8. Exposure controls/Personal protection

Exposition/ Technical measures: Not applicable.

Protection of hands, eyes and skin: To protect hands, eyes and skin, do not disassemble the product without professional basis.

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9. Physical and chemical properties

Physical state	Solid	Solubility in water	not applicable
Color	not applicable	Vapor pressure	not applicable
Odor	not applicable	Explosion limit	not applicable
pH value	not applicable	Oxidizing properties	not applicable
Specific gravity	not applicable	Flashpoint	not applicable

Refractive index	not applicable	Auto flammability	not applicable
Solubility in ethanol	not applicable	Partition coefficient	not applicable
Melting Point	not applicable	Boiling Point	not applicable
Freezing Point	not applicable		

10. Stability and Reactivity

The chemical materials concluded in the Product are sealed up, thus being stable, safe and eco-friendly under common conditions.

11. Toxicological information

The product is multi component mixture for which no toxicological data exists.

Precautions avoid disassembling the product without a professional basis.

12. Ecological information

In general, no ecological data is available for preparations.

Precautions avoid disposing into drainage systems and into the environment.

13. Disposable considerations

Precautions avoid disposing waste products into environment, sewerage, landfills or by incineration.

Obey the rules and precautions for separate collection and recycling of the waste products.

14. Transport Information

Road (ADR/RID) : not regulated

Air (ICAO/IATA) : not regulated

Sea (IMDG) : not regulated

* Remark: Avoid high-temperature, high-humidity condition.

15. Regulatory Information

Symbol: for transportation, collection, or environment protection (stipulated respectively by each contract).

Contains: transportation marks;
“separate collection” symbol;
“RoHS” symbol (maybe), etc.

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16. Other information

The information on this Material Safety Data Sheet (MSDS) was obtained from current and reputable sources. For any other question, please contact the manufacturer for further information.

FICHE DE DONNEES DE SECURITE

En accord avec Directive 2001/58/CE

Date: 01/01/2018

1. Produit chimique

Nom de la fiche signalétique: **La Pile Alcaline**

Fabricant: **SICHUAN CHANGHONG NEWENERGY TECHNOLOGY CO., LTD.**

Address: No.35, Route est de Mianxing, Parc de haute technologie, 621000, Mianyang, Sichuan, Chine.

Téléphone: +86-816-2418674

Fax: +86-816-2410058

2. La composition/Informations sur les ingrédients

Nature chimique: Source d'énergie chimique

N ° CAS / N ° EINECS: N'est pas applicable

Description INCI CTFE: La Pile sèche alcaline au zinc-manganèse(l'abréviation est la pile alcaline)

Numéro de tarif: "W" 85.06 10

NOTE IMPORTANTE: La pile ne doit pas être ouverte ou brûlée. L'exposition aux ingrédients contenus dans ou à leurs produits de combustion peut être nocive.

MATÉRIAU OU INGRÉDIENT	CAS #	PEL (OSHA)	TLV (ACGIH)	% (par Wt.)
Graphite	7782-42-5	15 mg/m ³ TWA (poussière totale) 5 mg/m ³ TWA (fraction respirable)	2 mg/m ³ TWA (fraction respirable)	2~6
Dioxyde de manganèse	1313-13-9	5 mg/m ³ Ceiling (comme Mn)	0.2 mg/m ³ TWA (comme Mn)	30~45
L'hydroxyde de potassium	1310-58-3	Aucun établi	2 mg/m ³ Plafonnage	4~8
Zinc	7440-66-6	15 mg/m ³ TWA PNOR* (poussière totale) 5 mg/m ³ TWA PNOR* (fraction respirable)	10 mg/m ³ TWA PNOC** (particules inhalables) 3 mg/m ³ TWA PNOC** (fraction respirable)	12~25

* PNOR: Particules non réglementées par ailleurs

** PNOC: Particules non classées ailleurs

3. Identification des dangers

Général: Pile alcaline - Respectez les règles courantes concernant la manipulation d'une source d'énergie chimique. Ne chauffez pas, ne rechargez pas, ne démontez pas le produit et ne le jetez pas au feu.

Risques physico-chimiques: Les matériaux chimiques contenus dans le produit sont scellés. Par conséquent, étant stables, sûrs et respectueux de l'environnement dans les conditions habituelles, ils ne peuvent présenter aucun risque physico-chimique.

Risques pour l'homme: Démontez le produit sans base professionnelle, peut provoquer une fuite d'électrolyte et une irritation de la peau.

Risques pour l'environnement: Éliminer le produit sans collecte séparée, peut entraîner une pollution par Hg / Cd / Pb (trace micro) ou par l'électrolyte de la solution alcaline.

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4. Premiers secours

Inhalation: N'est pas applicable

Contact avec la peau: Laver à l'eau claire dès qu'une fuite se produit et que le liquide interne éclabousse la peau

Contact avec les yeux: Rincer immédiatement les yeux à l'eau courante pendant au moins dix minutes. Consulter un ophtalmologiste.

Ingestion: Rincer la bouche avec de l'eau; Donnez beaucoup d'eau à boire. Obtenir un avis médical.

5. Lutte contre l'incendie

Moyen d'extinction approprié: Dioxyde de carbone (CO₂), mousse, poudre chimique sèche.

Moyen d'extinction à ne pas utiliser: N'utilisez jamais de jet d'eau direct, cela pourrait polluer le système d'eau.

Risques d'exposition liés aux produits de combustion: En cas d'incendie, du monoxyde de carbone ou d'autres substances organiques toxiques peuvent être générés.

Ne pas inhaler les émanations et la fumée.

Équipements de protection individuelle: Portez des vêtements de protection complets. Utilisez un appareil respiratoire autonome.

*** Remarque: Il peut également être éteint avec un extincteur de voiture.**

6. Mesures de rejet accidentel

Précautions individuelles: Porter des vêtements de protection. Éloignez les personnes non protégées.

Précautions pour la protection de l'environnement: Eviter les rejets et la pénétration dans les réseaux d'égouts, les voies navigables, les fosses et les caves.

Méthodes de nettoyage: Recueillir le produit répandu avec un insert absorbant standard tel que sable ou silice. Prendre soin des conditions bien ventilées. Recyclez ou éliminez les matériaux de manière appropriée.

7. Manipulation et stockage

Généralités: Respectez les règles et précautions habituelles concernant la manipulation de sources d'alimentation chimiques.

Protection contre l'incendie et l'explosion: Une explosion peut survenir en cas de court-circuit; recueillir le produit renversé avec un insert absorbant standard comme du sable ou de la silice.

Stockage: Conservez le produit dans un endroit propre, frais et ventilé, à une température comprise entre 10 et 30 ° C (pas plus de 40 ° C dans le cours normal des événements) et avec une humidité relative de 65% maximum; la durée de stockage ne doit pas être trop longue; les batteries doivent être bien disposées et éviter le tri du circuit causé par le contact des électrodes positives et négatives.

8. Contrôle de l'exposition / protection individuelle

Exposition / Mesures techniques: N'est pas applicable

Protection des mains, des yeux et de la peau: Pour protéger les mains, les yeux et la peau, ne démontez pas le produit sans consulter un professionnel.

9. Propriétés physiques et chimiques

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État physique	Solide	Solubilité dans l'eau	N'est pas applicable
Couleur	N'est pas applicable	La pression de vapeur	N'est pas applicable
Odeur	N'est pas applicable	Limite d'explosion	N'est pas applicable
pH	N'est pas applicable	Propriétés oxydantes	N'est pas applicable
Poids spécifique	N'est pas applicable	Point de rupture	N'est pas applicable
Indice de réfraction	N'est pas applicable	Inflammabilité automatique	N'est pas applicable
Solubilité dans l'éthanol	N'est pas applicable	Coefficient de partage	N'est pas applicable
Point de fusion	N'est pas applicable	Point d'ébullition	N'est pas applicable
Point de congélation	N'est pas applicable		

10. Stabilité et réactivité

Les matériaux chimiques contenus dans le produit sont scellés, ce qui les rend stables, sûrs et écologiques dans des conditions normales.

11. Informations toxicologiques

Le produit est un mélange à plusieurs composants pour lequel il n'existe aucune donnée toxicologique.

Les précautions d'éviter de démonter le produit sans une base professionnelle.

12. Information écologique

En général, aucune donnée écologique n'est disponible pour les préparations.

Les précautions d'éviter de jeter dans les systèmes de drainage et dans l'environnement.

13. Considérations jetables

Les précautions à prendre évitent d'évacuer les déchets dans l'environnement, les égouts, les décharges ou par incinération.

Respectez les règles et les précautions relatives à la collecte et au recyclage séparés des déchets.

14. Informations de transport

Terrestre (ADR/RID) : non réglementé

Aérien (ICAO/IATA) : non réglementé

Maritime (IMDG) : non réglementé

* Remarque: Évitez les conditions de température élevée et d'humidité élevée.



15. Informations réglementaires

Symbole: pour le transport, la collecte ou la protection de l'environnement (stipulés respectivement dans chaque contrat).

Contient: marques de transport;
symbole «collection séparée»;
symbole «RoHS» (peut-être), etc.

16. Les autres informations

Les informations sur cette fiche de données de sécurité (MSDS) ont été obtenues auprès de sources actuelles et réputées. Pour autre question, veuillez contacter le fabricant pour plus d'informations.