Conforms to USDOL OSHA 29CFR 1910.1200 HAZCOM

SAFETY DATA SHEET

Air Wick Essential Mist - Lavender & Almond Blossom

1. Product and company identification

Product name : Air Wick Essential Mist - Lavender & Almond Blossom

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

Reckitt Benckiser (Canada) Inc.
1680 Tech Avenue, Unit #2
Mississauga, Ontario L4W 5S9
CANADA
Telephone: +1 905 283 7000

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**

Synonym : FIL,AWICK,LAVDRM

Product use : Air care

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 # : D8395492

Formulation # : 3227106

Relevant identified uses of the substance or mixture and uses advised against

Identified uses
Consumer use - Air care

2. Hazards identification

Classification of the substance or mixture : ASPIRATION HAZARD - Category 1

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : May be fatal if swallowed and enters airways.

Precautionary statements

General : Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Use only in a well-ventilated area.

Response : IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.

Storage : Store locked up.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements : Contains Allergen. May produce an allergic reaction.

Hazards not otherwise classified : None known.

3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated light	30 - 60	64742-47-8
C11-13 Isoparaffin	10 - 30	64742-48-9
Linalool	0.1 - 1	78-70-6
Coumarin	0.1 - 1	91-64-5
alpha-Hexylcinnamaldehyde	0.1 - 1	101-86-0
4-tert-Butylcyclohexyl acetate	0.1 - 1	32210-23-4
dl-Citronellol	0.1 - 1	106-22-9
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone	0.1 - 1	54464-57-2

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

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.

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.

Ingestion : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. 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. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. 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 : May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : Adverse symptoms may include the following:
nausea or vomiting

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

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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 : Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

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.

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. Do not touch or walk through spilled material. 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. 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. 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.

7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

8. Exposure controls/personal protection

Control

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated light	**ACGIH TLV (United States, 1/2021). Absorbed through skin.** TWA: 200 mg/m³, (as total hydrocarbon vapor) 8 hours.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

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 : 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.

8. Exposure controls/personal protection

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.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid.

Color : Not available.

Odor : Not available.

Odor threshold : Not available.

pH : Not available.

Melting point/freezing point : Not available.

Boiling point, initial boiling point, and boiling range : Not available.

Flash point : 79°C

Evaporation rate Not available.

Flammability Not available.

Lower and upper explosion limit/flammability limit Not available.

Vapor pressure : Not available.

Relative vapor density : Not available.

Relative density : Not available.

Density : 0.78 to 0.81 g/cm³ [20 to 25°C (68 to 77°F)]

Solubility(ies) :

Not available.

Solubility in water : Not available.

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

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Kinematic (40°C (104°F)): <7 mm^2/s (<7 cSt)

Particle characteristics

Median particle size : Not applicable.

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 : No specific data.

Incompatible materials : No specific data.

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
Distillates (petroleum), hydrotreated light	LD50 Dermal	Mammal - species unspecified	>3160 mg/kg	-
	LD50 Oral	Mammal - species unspecified	>15000 mg/kg	-
Linalool	LD50 Dermal	Rabbit	5610 mg/kg	-
	LD50 Dermal	Rat	5610 mg/kg	-
	LD50 Oral	Rat	2790 mg/kg	-
Coumarin	LD50 Oral	Rat	293 mg/kg	-
alpha-Hexylcinnamaldehyde	LD50 Oral	Rat	3100 mg/kg	-
4-tert-Butylcyclohexyl acetate	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3550 mg/kg	-
dl-Citronellol	LD50 Dermal	Rabbit	2650 mg/kg	-
	LD50 Oral	Rat	3450 mg/kg	-

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

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Linalool	Eyes - Moderate irritant	Rabbit	-	1 hours 0.1 Ml	-
	Eyes - Moderate irritant	Rabbit	-	100 Ul	-
	Skin - Moderate irritant	Guinea pig	-	24 hours 100 mg	-
	Skin - Mild irritant	Human	-	72 hours 32 %	-
	Skin - Mild irritant	Man	-	48 hours 16 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 100 mg	-
alpha-Hexylcinnamaldehyde	Skin - Severe irritant	Guinea pig	-	24 hours 100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 100 mg	-
4-tert-Butylcyclohexyl acetate	Skin - Mild irritant	Guinea pig	-	4 hours 3 %	-

11. Toxicological information

	Skin - Moderate irritant	Rabbit	-	4 hours 100 %	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
dl-Citronellol	Eyes - Moderate irritant	Rabbit	-	0.42 %	-
	Skin - Severe irritant	Guinea pig	-	24 hours 100 mg	-
	Skin - Moderate irritant	Man	-	48 hours 16 mg	-
	Skin - Moderate irritant	Rabbit	-	4 hours 0.42 %	-
	Skin - Severe irritant	Rabbit	-	24 hours 100 mg	-
	Skin - Severe irritant	Rabbit	-	4 hours 0.5 Ml	-

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 : Contains Allergen. May produce an allergic reaction.

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.

Classification

Product/ingredient name	OSHA	IARC	NTP
Coumarin	-	3	-

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.

11. Toxicological information

Aspiration hazard

Name	Result
C11-13 Isoparaffin	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 : May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : Adverse symptoms may include the following:
nausea or vomiting

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.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

11. Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Air Wick Essential Mist_FF3227106 (D8395492) NA	17608.1	N/A	N/A	N/A	N/A
Linalool	2790	5610	N/A	N/A	N/A
Coumarin	500	N/A	N/A	N/A	N/A
alpha-Hexylcinnamaldehyde	3100	N/A	N/A	N/A	N/A
4-tert-Butylcyclohexyl acetate	3550	N/A	N/A	N/A	N/A
dl-Citronellol	3450	2650	N/A	N/A	N/A

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Distillates (petroleum), hydrotreated light	Acute LC50 5900 µg/l Fresh water	Fish - Lepomis macrochirus	4 days
	Acute LC50 2200 µg/l Fresh water	Fish - Lepomis macrochirus	4 days
	Acute LC50 2600 µg/l Fresh water	Fish - Oncorhynchus mykiss	4 days
Linalool	Acute EC50 36.7 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 28.8 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
Coumarin	Acute LC50 13500 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 56000 µg/l Fresh water	Fish - Poecilia reticulata	96 hours

Conclusion/Summary : Based on Calculation Method: Harmful to aquatic life with long lasting effects.

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Linalool	-	62.4 % - Readily - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Linalool	-	-	Readily

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Linalool	2.84	-	low
Coumarin	1.39	-	low
4-tert-Butylcyclohexyl acetate	4.8	-	high
dl-Citronellol	3.41	-	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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

Additional 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.

Transport in bulk according to IMO instruments : Not available.

15. Regulatory information

U.S. Federal regulations : **United States inventory (TSCA 8b)**: Not determined.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

15. Regulatory information

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 : ASPIRATION HAZARD - Category 1

Composition/information on ingredients

Name	%	Classification
Distillates (petroleum), hydrotreated light	30 - 60	FLAMMABLE LIQUIDS - Category 3
C11-13 Isoparaffin	10 - 30	FLAMMABLE LIQUIDS - Category 4 ASPIRATION HAZARD - Category 1
Linalool	0.1 - 1	FLAMMABLE LIQUIDS - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B
Coumarin	0.1 - 1	ACUTE TOXICITY (oral) - Category 4 SKIN SENSITIZATION - Category 1B
alpha-Hexylcinnamaldehyde	0.1 - 1	EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B
4-tert-Butylcyclohexyl acetate	0.1 - 1	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B
dl-Citronellol	0.1 - 1	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone	0.1 - 1	SKIN IRRITATION - Category 2 SKIN SENSITIZATION - Category 1B

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : The following components are listed: BENZYL ACETATE; ACETIC ACID, PHENYLMETHYL ESTER

Pennsylvania : None of the components are listed.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

Label elements

CPSC

Signal word : CAUTION!

Hazard statements : EYE IRRITANT
Prolonged or frequent skin contact may cause an allergic reaction

Precautionary measures : Keep out of the reach of children. Avoid contact with eyes, skin and clothing. Do not ingest. Use only in a well-ventilated area.

15. Regulatory information

CCCR

Signal word : CAUTION

Hazard statements : EYE IRRITANT
Prolonged or frequent skin contact may cause an allergic reaction

Precautionary measures : Keep out of reach of children.
Avoid contact with eyes, skin and clothing. Do not ingest. Use only in a well-ventilated area.

Additional information / Recommendations

Additional information : FIRST AID TREATMENT: Contains fragrance oils. If swallowed, DO NOT induce vomiting. Call a physician or Poison Control Centre immediately. If in eyes, rinse eyes with water. Remove any contact lenses and continue to rinse eyes for at least 15 minutes. If on skin, wash area with soap and water. If irritation persists, get medical attention. Discontinue use immediately and get medical attention if a reaction develops. Wash hands after handling.

Recommendations : No known significant effects or critical hazards.

Recommendations : No known significant effects or critical hazards.

16. Other information

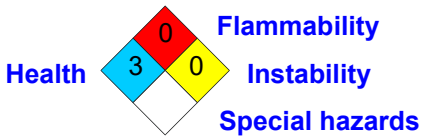
Hazardous Material Information System (U.S.A.)

Health	/	3
Flammability		0
Physical hazards		0

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 and the associated label are not required on SDSs or products leaving a facility 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 trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

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



NFPA (30B) aerosol Flammability Not applicable

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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.

16. Other information

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

Date of issue : 10/14/2022

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Version : 2

Prepared by : Reckitt Benckiser LLC.
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FAX: 201-476-7770

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.

CSPA Product Care®

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

PRODUCT SPECIFICATION

Alkaline AAA Size Battery
Model: AAA LR03

Prepared	Reviewed	Approved
Shen juan Date:2016.06.18	Yu Zemin Date:2016.06.18	Zhang qingshun Date:2016.06.18

109 INDUSTRIAL ROAD, NANPING FUJIAN PROVINCE,CHINA

http://www.nanfu.com

Revision History

Revision	Date	Originator	Description
A0	2016-6-18		Original Release

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1. General Information

1.1 Scope

This specification defines the technical requirements for alkaline cell, Zn/MnO2, LR03/AAA Size(No mercury and Cadmium added) to be supplied to the Customer by Fujian Nanping Nanfu Battery Co.,Ltd.

1.2 Production classification

Alkaline Battery

1.3 Model type

ANSI:24A IEC:LR03 Size:AAA

2. Reference standards

2.1 International standards

IEC60086-1:2015——Primary batteries-part 1:General

IEC60086-2:2015——Primary batteries-part 2：Physical and technologic specifications

IEC60086-5:2016——Primary batteries-part 5：Safety of batteries with aqueous electrolyte

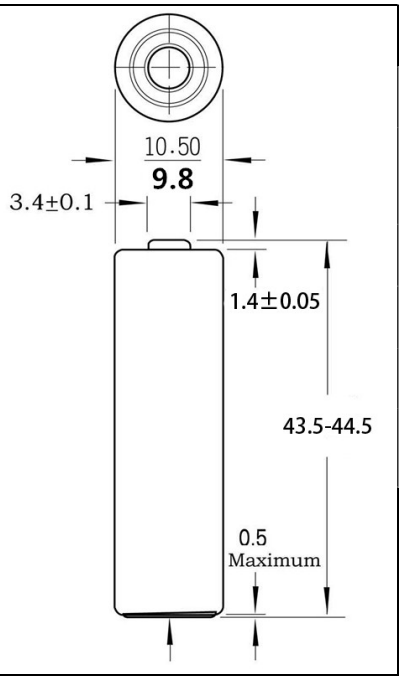
2.2 EU's battery directive

This product complies with EU's battery directive (2006/66/EC)

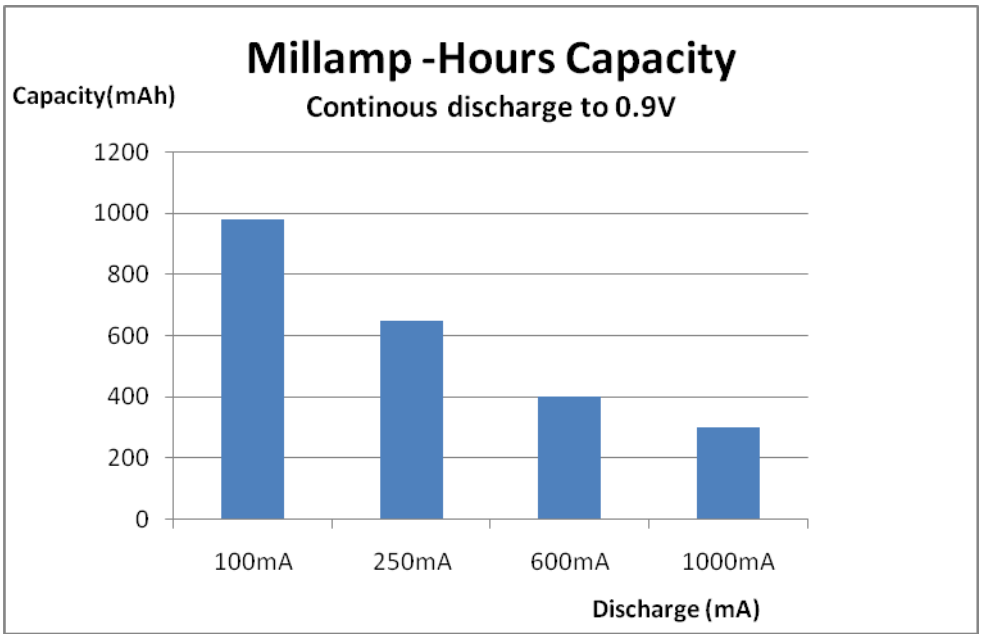
Packaging materials comply with EU's directive on packaging materials and waste (94/62/EC)

3. Specification

Nominal voltage	1.5Volt
Open circuit voltage	$1.5^{+0.18}_{-0}$ Volt
Nominal capacity※	1100mAh (Test condition:75Ω, continuous discharge, e.v= 0.9V).
Typical weight	12±1g
Terminals	flat
Storage temperature range	5~30℃
Working temperature range	Temperature of -20 ℃~ 54 ℃, humidity of 0% -75%
Shelf life	60Months（each battery will carry a manufacturing date code followed by month and year of manufacturing for domestic and expiry for export.）



※：Capacity varies from different mA, refers to the below chart for more info.



4. Electrical Characteristic

- Unless other stated, all measurements are to be performed at:20±2℃,55± 20% RH
- All samples are normalized for 8 hours at least at the above environment prior to measurement
- The digital voltmeter (DCM) is with the precision of 1mV (impendence ≥ 1 mΩ)
- The load resistance of the total circuit is accurate within±0.5% of the specified value

4.1 Open circuit voltage and closed circuit voltage (Load resistance 5Ω , 0.3S)

Voltage	OCV(V)	CCV(V)
Initial	1.50-1.68	1.40~1.50

4.2 Service output

Application	Test condition			Average duration at 20°C					
Load		Daily period	End voltage	Initial		Stored 1 year	Stored 3 years	Stored 5 years	unit
				nominal	typical				
Portable lighting	5.1 Ω	4m/h,8 h/d	0.9	3.8	4.0	3.5	3.2	2.9	h
Remote control	24 Ω	15s/m，8h/d	1	20.0	20.4	18.4	17.0	15.0	h
photoflash	600mA	10s/m，1h/d	0.9	280	300	258	238	210	pulse
Digital audio	50mA	1h/12h ,24h/d	0.9	19.5	20.6	17.9	16.6	14.6	h
toy	5.1 Ω	1h/d	0.8	3.5	4.1	3.2	3.0	2.6	h
--------	20 Ω	24h/d	0.9	17.0	18.1	15.6	14.5	12.8	h

5. Leakage resistance of batteries

Item	Over-discharge			High temperature		
LR03	Temperature and humidity	Method	Requirements	Temperature and humidity	Time	Requirements
	20±2℃ 55±20%	After measured discharge capacity, continue discharge until load voltage drop to less than 40% of original	No leakage and no deformation	60±2℃ 90±5%	20Days	No leakage

6. Reliability/Safety Requirements

6.1 Reliability Test Requirements

Test	Conditions	Sample	Requirements
Lot Capacity	Discharge continuously using a load resistance of 75 ohm (± 0.5%) to a closed circuit voltage of 0.9V.	9	≥1100mAh
Variable Frequency Vibration- IEC 60086-5	Simple harmonic, maximum excursion of 1.6 mm. Modulate frequency up and down at 1 Hz/min between 10 and 55 Hz. Test in 3 mutually perpendicular directions for 90 ± 5 minutes per direction	5	No leakage, No fire, No explosion
Low Temperature Storage	-20 ± 2°C for 24 hrs	5	
High Temperature Storage	55 ± 2°C for 100 hrs	5	
Corrosion Resistance	60 ± 2°C / 90± 5% RH for 7 days	**5**	
Drop Test -IEC 60086-5	Drop at 1 m height onto concrete 6 times, twice on each the battery's 3 axes.	5	
Storage after partial use	Discharge a fresh battery under IEC 60086-2 until the service life falls by 50%of MAD value, followed by storage at(45±5)℃for 30 days	5	
Transportation-shock	Half sine wave shock with 75 g_n in first 3 Milliseconds, and 125-175 g_n peak acceleration shock pulse, shock one time in three perpendicular directions g_n=9,80665m/s²	5	

6.2 Safety Test Requirements

Test	Conditions	Sample	Requirements
High temperature exposure	70 +/- 2 °C for 8 weeks	5	No leakage, No fire, No explosion
Thermal Cycling Shock-IEC 60086-5	Repeat the following temperature cycle 10 times: • Heat to +70°C within 30 minutes, hold for 4 hours. • Cool to +20°C within 30 minutes, hold for 2 hours. • Cool to -20°C within 30 minutes, hold for 4 hours. • Heat to +20°C within 30 minutes After the 10th cycle store batteries for 7 days	5	
Short Circuit-IEC 60086-5	Connect positive and negative terminals using circuitry with a resistance of less than 0.1 Ohm. Discharge for 24 hours.	5	No fire, No explosion
Over Discharge Test	Discharge one fresh battery under IEC 60086-2, with highest MAD value until on-load voltage falls to (n x 0.6v)"n" is the number of cells. Then, connect 3 fresh batteries of the same brand, type and origin in series. Continue discharge until voltage falls to four times (n x 0.6v). The value of the resistor shall be approximately four times the lowest value from the resistive load IEC60086-2.The final value of the resistor shall be the nearest value to that prescribed in 6.4 of IEC 60086-1	20	
Safety Vent Test	Put 4 fresh batteries in a series ring connection with one battery with reversed polarity for 1 day. Remove batteries from circuit and observe for 7 days. Safety vent shall operate.	20	No fire, No explosion

7. Information of safety

7.1 Safety precautions during handling of batteries

- Insert batteries correctly with regard to the polarities(+ & -)of battery and the equipment
- Do not short-circuit batteries
- Do not charge batteries
- Do not force discharge batteries
- Do not mix old and new batteries or batteries of different types or brands
- Exhausted batteries should be immediately removed from equipment and properly disposed
- Do not heat batteries
- Do not weld or solder directly to batteries
- Do not dismantle batteries
- Do not deform batteries
- Do not dispose of batteries in fire
- Keep batteries out of the reach of children
- Do not allow children to replace batteries without adult supervision
- Do not encapsulate or modify batteries
- Store unused batteries in their original packaging away from metal object. If already unpacked, do not mix or jumble batteries.
- Remove batteries from equipment if it is note to be used for an extended period of time unless it is for emergency purposes.

7.2 Packaging

The packaging shall be adequate to avoid mechanical damage during transport, handling and stacking. The materials and packaging design shall be chosen so as to prevent the development of unintentional electrical contact, corrosion of the terminals and some protection from the environment.

7.3 Display and storage

- Batteries shall be stored in well-ventilated, dry and cool conditions
- Battery cartons should not be piled up in several layers(or should not exceed a specified height)
- When batteries are stored in warehouses or displayed in retail stores, they should not be exposed to direct sun rays for a long time or placed in areas where they get wet by rain
- Do not mix unpacked batteries so as to avoid mechanical damage and/or short-circuit among each other
- Do not keep batteries at relative humidity of 75% or above
- Do not keep batteries at temperature of 45℃ or above

7.4 Transportation

When loaded for transportation, battery packages should be so arranged to minimize the risk of falling e.g.one from the top of another. They should not be stacked so high that damage to the lower packages occurs, Protection from inclement weather should be provided.

7.5 Disposal

- Do not dismantle batteries
- Do not dispose of batteries in fire except under conditions of controlled incineration
- Primary batteries may be disposed of via the communal refuse arrangements, provided that no local rules to the contrary exist
- Where there is provision for the collection of used batteries, the following should be considered:
  a) Store collected batteries in a non-conductive container.
  b) Store collected batteries in a well-ventilated area. Since some used batteries may still contain a residual charge, they could be short circuited, charged or force discharged and thereby evolve hydrogen gas. If collection containers and storage areas are not properly ventilated, hydrogen gas can build up an explosion in the presence of an ignition source.
  c) Do not mix collected batteries with other materials. Since some used batteries may still contain a residual charge, they could be short circuited, charged or force discharged. The subsequent possible heat generation can ignite flammable wastes such as oily rags, paper or wood and can cause a fire.
  d) Consider protecting used battery terminals, particularly those batteries with high voltage, to preclude short circuits, charging and force discharging, for instance, by means of covering battery terminals with insulating tape.
  e) Failure to observe these recommendations may result in leakage, fire, and/or explosion.

8.Instructions for use

- Always select the correct size and grade of battery most suitable for the intended use. Information provided with the equipment to assist correct battery selection should be retained for reference.
- Replace all batteries of a set at the same time.
- Clean the battery contacts and also those of the equipment prior to battery installation.
- Ensure that the batteries all installed correctly with regard to polarity.
- Remove batteries from equipment which is not to be used for an extended period of time.
- Remove exhausted batteries promptly.

9.Heavy metal content

Mercury(Hg) content should be less than 1PPM
Cadmium (Cd) content should be less than 2 PPM
Lead (Pb) content should be less than 15 PPM

10.Note

Any other items do not list in here please refer to IEC 60086 standard.