PLAZE

SAFETY DATA SHEET

1. Identification

Product number 18-0916

Product identifier 7.0 oz Blue Wave Metered Air Freshener
Company information PLZ AEROSCIENCE CORPORATION

1000 INTEGRAM DRIVE

PACIFIC, MO 63069-3450 United States General Assistance 1-636-334-9100

Company phone General Assistance 1-636-36-36-836-835

Emergency telephone outside

1-952-852-4646

US

Version # 01

Recommended use AIR FRESHENER
Recommended restrictions None known.

2. Hazard(s) identification

Physical hazardsFlammable aerosolsCategory 1Health hazardsSerious eye damage/eye irritationCategory 2ASensitization, skinCategory 1

Specific target organ toxicity, single exposure Category 3 narcotic effects

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Extremely flammable aerosol. May cause an allergic skin reaction. Causes serious eye irritation.

May cause drowsiness or dizziness.

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open

flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing gas. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear eye protection/face

protection. Wear protective gloves.

ResponseIf on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical

advice/attention. Wash contaminated clothing before reuse.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from

sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Environmental hazards Hazardous to the aquatic environment, acute Category 3

hazard

Hazardous to the aquatic environment, Category 3

long-term hazard

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Acetone		67-64-1	40 - 60
Diethylene Glycol Monoethyl Ether		111-90-0	10 - 20
Propane		74-98-6	10 - 20
Isobutane		75-28-5	2.5 - 10
Benzoic Acid, 2-hydroxy-, Phenylmethyl Ester		118-58-1	0.1 - 1
Cedr-8-Enyl Methyl Ketone		32388-55-9	0.1 - 1
Hexyl cinnamal		101-86-0	0.1 - 1
Other components below reportable	le levels		2.5 - 10

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses. if Eye contact present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth.

Ingestion

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Most important Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an symptoms/effects, acute and allergic skin reaction. Dermatitis. Rash. delayed

Indication of immediate Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. medical attention and special treatment needed

> Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

General information

Suitable extinguishing media Water spray. Alcohol resistant foam. Powder. Carbon dioxide (CO2). Unsuitable extinguishing Do not use water jet as an extinguisher, as this will spread the fire. media

Specific hazards arising from Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed. the chemical

Firefighters must use standard protective equipment including flame retardant coat, helmet with Special protective equipment face shield, gloves, rubber boots, and in enclosed spaces, SCBA. and precautions for firefighters

Move containers from fire area if you can do so without risk. Containers should be cooled with Fire fighting equipment/instructions water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Use standard firefighting procedures and consider the hazards of other involved materials. Move Specific methods containers from fire area if you can do so without risk. Use water spray to cool unopened containers. In the event of fire and/or explosion do not breathe fumes.

General fire hazards Extremely flammable aerosol.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing gas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Use water spray to reduce vapors or divert vapor cloud drift. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent product from entering drains. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Avoid breathing gas. Avoid contact with eyes, skin, and clothing. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Level 3 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122°F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

Components	Type	Value	
Acetone (CAS 67-64-1)	PEL	2400 mg/m3	
		1000 ppm	
Propane (CAS 74-98-6)	PEL	1800 mg/m3	
		1000 ppm	
US. ACGIH Threshold Limit Value	98		
Components	Туре	Value	
Acetone (CAS 67-64-1)	STEL	500 ppm	
	TWA	250 ppm	
Isobutane (CAS 75-28-5)	STEL	1000 ppm	
US. NIOSH: Pocket Guide to Che	mical Hazards		
Components	Туре	Value	
Acetone (CAS 67-64-1)	TWA	590 mg/m3	
,		250 ppm	
Isobutane (CAS 75-28-5)	TWA	1900 mg/m3	
		800 ppm	
Propane (CAS 74-98-6)	TWA	1800 mg/m3	
,		1000 ppm	
US. Workplace Environmental Ex	posure Level (WEEL) Guides		
Components	Туре	Value	
Diethylene Glycol Monoethyl Ether (CAS 111-90-0)	TWA	140 mg/m3	
/		25 ppm	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time	
Acetone (CAS 67-64-1)	25 mg/l	Acetone	Urine	*	

^{* -} For sampling details, please see the source document.

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

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

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Other Wear appropriate chemical resistant clothing.

Respiratory protection If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an

air-supplied respirator.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not

be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state Gas.
Form Aerosol.
Color Not available.
Odor Not available.
Odor threshold Not available.
PH Not available.
Melting point/freezing point Not available.

Initial boiling point and boiling

range

132.89 °F (56.05 °C) estimated

Flash point -156.0 °F (-104.4 °C) Propellant estimated

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

2.4 % estimated

Flammability limit - upper

(%)

11.9 % estimated

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 70 psig @20C estimated

95 psig @54C estimated

Vapor densityNot available.Relative densityNot available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature 783.29 °F (417.38 °C) estimated

Decomposition temperatureNot available.ViscosityNot available.

Other information

Explosive properties Not explosive.

Heat of combustion (NFPA

30B)

33.92 kJ/g estimated

Oxidizing properties Not oxidizing.

Specific gravity 0.77 estimated

VOC (Weight %) 29.37 % estimated

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stabilityMaterial is stable under normal conditions. **Possibility of hazardous**Hazardous polymerization does not occur.

reactions

Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materialsStrong oxidizing agents. Nitrates. Fluorine. Chlorine.Hazardous decompositionNo hazardous decomposition products are known.

products

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause drowsiness and dizziness. Headache. Nausea, vomiting.

Skin contact May cause an allergic skin reaction.

Eye contact Causes serious eye irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an

allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity Narcotic effects. May cause an allergic skin reaction.

Components	Species	Test Results			
Acetone (CAS 67-64-1)					
<u>Acute</u>					
Dermal					
LD50	Guinea pig	> 7426 mg/kg, 24 Hours			
		> 9.4 ml/kg, 24 Hours			
	Rabbit	> 7426 mg/kg, 24 Hours			
		> 9.4 ml/kg, 24 Hours			
Inhalation					
LC50	Rat	55700 ppm, 3 Hours			
		132 mg/l, 3 Hours			
		50.1 mg/l			
Oral					
LD50	Rat	5800 mg/kg			
		2.2 ml/kg			
Benzoic Acid, 2-hydroxy-, F	Phenylmethyl Ester (CAS 118-58-1)				
<u>Acute</u>					
Dermal					
LD50	Rabbit	> 2000 mg/kg, 24 Hours			
Oral					
LD50	Rat	3031 mg/kg			

Product name: 7.0 oz Blue Wave Metered Air Freshener

SDS US

Components Species Test Results

Cedr-8-Enyl Methyl Ketone (CAS 32388-55-9)

Acute Dermal

LD50 Rat > 2000 mg/kg

Diethylene Glycol Monoethyl Ether (CAS 111-90-0)

Acute Dermal

LD50 Guinea pig 5900 mg/kg, Days

Rabbit 9143 mg/kg, 24 Hours

8500 mg/kg, 2 Hours

Oral

LD50 Guinea pig 4970 mg/kg

 Mouse
 6031 mg/kg

 Rabbit
 5600 mg/kg

 Rat
 10502 mg/kg

5.4 ml/kg

Isobutane (CAS 75-28-5)

Acute Inhalation

Gas

LC50 Mouse 1237 mg/l, 120 Minutes

52 %, 120 Minutes

LC50 Rat 1355 mg/l

Propane (CAS 74-98-6)

<u>Acute</u>

Inhalation

LC50 Mouse 1237 mg/l, 120 Minutes

52 %, 120 Minutes

Rat 1355 mg/l

658 mg/l/4h

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - May cause drowsiness and dizziness.

single exposure

^{*} Estimates for product may be based on additional component data not shown.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not likely, due to the form of the product.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

	Species	Test Results
)		
EC50	Water flea (Daphnia magna)	21.6 - 23.9 mg/l, 48 hours
LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	4740 - 6330 mg/l, 96 hours
oethyl Ether (CAS	111-90-0)	
LC50	Bluegill (Lepomis macrochirus)	> 10000 mg/l, 96 hours
	EC50 LC50 oethyl Ether (CAS	EC50 Water flea (Daphnia magna) LC50 Rainbow trout,donaldson trout (Oncorhynchus mykiss) oethyl Ether (CAS 111-90-0)

^{*} Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Acetone	-0.24
Diethylene Glycol Monoethyl Ether	-0.54
Isobutane	2.76
Propane	2.36

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents

under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international

regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal. Do not re-use empty containers.

14. Transport information

DOT

UN number UN1950

UN proper shipping name Aerosols, flammable, (each not exceeding 1 L capacity)

Transport hazard class(es)

Class 2.1 Subsidiary risk -Label(s) 2.1

Packing group Not applicable.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisionsN82Packaging exceptions306Packaging non bulkNonePackaging bulkNone

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking.

IATA

UN1950 **UN** number

Aerosols, flammable UN proper shipping name

Transport hazard class(es)

Class 2.1 Subsidiary risk 2.1 Label(s)

Packing group Not applicable.

Environmental hazards No. **ERG Code** 10L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Read safety

instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

aircraft

Allowed with restrictions.

Allowed with restrictions. Cargo aircraft only

Packaging Exceptions LTD QTY

IMDG

UN number UN1950 **AEROSOLS UN proper shipping name**

Transport hazard class(es)

Class 2.1 Subsidiary risk Label(s) None

Packing group Not applicable.

Environmental hazards

Marine pollutant No. **EmS** F-D, S-U

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Read safety

instructions, SDS and emergency procedures before handling.

Packaging Exceptions Transport in bulk according to

Annex II of MARPOL 73/78 and

the IBC Code

LTD QTY Not applicable.

DOT



IATA; IMDG



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Acetone (CAS 67-64-1) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

Chemical nameCAS number% by wt.Hexyl cinnamal101-86-00.1 - 1

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Isobutane (CAS 75-28-5) Propane (CAS 74-98-6)

Safe Drinking Water Act

Not regulated.

(SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Acetone (CAS 67-64-1) 6532

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Acetone (CAS 67-64-1) 35 %WV

DEA Exempt Chemical Mixtures Code Number

Acetone (CAS 67-64-1) 6532

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.

(a))

Acetone (CAS 67-64-1) Isobutane (CAS 75-28-5)

US. Massachusetts RTK - Substance List

Acetone (CAS 67-64-1) Isobutane (CAS 75-28-5) Propane (CAS 74-98-6)

US. New Jersey Worker and Community Right-to-Know Act

Acetone (CAS 67-64-1) Isobutane (CAS 75-28-5) Propane (CAS 74-98-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Acetone (CAS 67-64-1) Isobutane (CAS 75-28-5)

Propane (CAS 74-98-6)

US. Rhode Island RTK

Acetone (CAS 67-64-1) Isobutane (CAS 75-28-5) Propane (CAS 74-98-6)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Diethanolamine (CAS 111-42-2) Listed: June 22, 2012

US - California Proposition 65 - CRT: Listed date/Developmental toxin

2-Ethoxyethanol (CAS 110-80-5) Listed: January 1, 1989 Ethylene Glycol (CAS 107-21-1) Listed: June 19, 2015 US - California Proposition 65 - CRT: Listed date/Male reproductive toxin 2-Ethoxyethanol (CAS 110-80-5) Listed: January 1, 1989

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing

country(s).

16. Other information, including date of preparation or last revision

Issue date 09-12-2018

Version # 01

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.