Homebright Disinfectant Spray - Country Scent

JTC Import Export Pty Ltd

Chemwatch Hazard Alert Code: **4**

Chemwatch: **5393-03**
Version No: **5.1.1.1**
Safety Data Sheet according to WHS and ADG requirements

Issue Date: **22/10/2020**
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S.GHS.AUS.EN

SECTION 1 Identification of the substance / mixture and of the company / undertaking

Product Identifier

Product name	Homebright Disinfectant Spray - Country Scent
Synonyms	Product Code: 67539; 67540; 70386; 70395; 70396; Homebright Disinfectant Spray - Citrus Scent; HomeBright Disinfectant Spray - Linen Scent; HomeBright Disinfectant Spray - Fresh Lavender; HomeBright Disinfectant Spray - Hawaiian Mist
Proper shipping name	AEROSOLS
Other means of identification	Not Available

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

Relevant identified uses	This product is an EPA - registered end-use antimicrobial aerosol spray.

Details of the supplier of the safety data sheet

Registered company name	**JTC Import Export Pty Ltd**
Address	98 South Park Drive Dandenong South VIC 3175 Australia
Telephone	+61 3 9532 5100
Fax	+61 3 9532 6102
Website	http://www.jtcimportexport.com.au
Email	sales@jtcimportexport.com.au

Emergency telephone number

Association / Organisation	**JTC Import Export Pty Ltd**
Emergency telephone numbers	+61 3 9532 5100 (Mon-Thurs 8.30am to 5.30pm; Friday 8.30am to 3pm)
Other emergency telephone numbers	Not Available

SECTION 2 Hazards identification

Classification of the substance or mixture

Poisons Schedule	Not Applicable
Classification [1]	Flammable Aerosols Category 1, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Germ cell mutagenicity Category 2, Acute Aquatic Hazard Category 3
Legend:	*1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI*

Label elements

Hazard pictogram(s)	
Signal word	**Danger**

Hazard statement(s)

H222	Extremely flammable aerosol.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H341	Suspected of causing genetic defects.

H402	Harmful to aquatic life.
AUH044	Risk of explosion if heated under confinement.

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Pressurized container: Do not pierce or burn, even after use.
P281	Use personal protective equipment as required.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement(s) Response

P308+P313	IF exposed or concerned: Get medical advice/attention.
P321	Specific treatment (see advice on this label).
P362	Take off contaminated clothing and wash before reuse.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P302+P352	IF ON SKIN: Wash with plenty of water.
P332+P313	If skin irritation occurs: Get medical advice/attention.

Precautionary statement(s) Storage

P405	Store locked up.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
64-17-5	15-40	ethanol
67-63-0	1-5	isopropanol
7632-00-0	0.1-1	sodium nitrite
85409-23-0	0.1-1	benzyl C12-14 alkyldimethylammonium chloride
110-91-8	NotSpec	morpholine
68476-85-7.	4-12	hydrocarbon propellant

SECTION 4 First aid measures

Description of first aid measures

Eye Contact	‣ If in eyes, hold eyelids apart and flush the eye continuously with running water. ‣ Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. ‣ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ‣ Seek medical attention without delay; if pain persists or recurs seek medical attention. ‣ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. If aerosols come in contact with the eyes: ‣ Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes with fresh running water. ‣ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ‣ Transport to hospital or doctor without delay. ‣ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If solids or aerosol mists are deposited upon the skin: ‣ Flush skin and hair with running water (and soap if available). ‣ Remove any adhering solids with industrial skin cleansing cream. ‣ **DO NOT** use solvents. ‣ Seek medical attention in the event of irritation.
Inhalation	If aerosols, fumes or combustion products are inhaled: ‣ Remove to fresh air. ‣ Lay patient down. Keep warm and rested. ‣ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. ‣ If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. ‣ Transport to hospital, or doctor.

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Ingestion	- If swallowed do **NOT** induce vomiting. - If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. - Observe the patient carefully. - Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. - Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. - Seek medical advice.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 Firefighting measures

Extinguishing media

- Alcohol stable foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.
- Water spray or fog - Large fires only.

SMALL FIRE:

- Water spray, dry chemical or CO2

LARGE FIRE:

- Water spray or fog.

Special hazards arising from the substrate or mixture

Fire Incompatibility	- Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Advice for firefighters

Fire Fighting	- Alert Fire Brigade and tell them location and nature of hazard. - May be violently or explosively reactive. - Wear breathing apparatus plus protective gloves. - Prevent, by any means available, spillage from entering drains or water course. - If safe, switch off electrical equipment until vapour fire hazard removed. - Use water delivered as a fine spray to control fire and cool adjacent area. - **DO NOT** approach containers suspected to be hot. - Cool fire exposed containers with water spray from a protected location. - If safe to do so, remove containers from path of fire. - Equipment should be thoroughly decontaminated after use.
Fire/Explosion Hazard	- Liquid and vapour are highly flammable. - Severe fire hazard when exposed to heat or flame. - Vapour forms an explosive mixture with air. - Severe explosion hazard, in the form of vapour, when exposed to flame or spark. - Vapour may travel a considerable distance to source of ignition. - Heating may cause expansion or decomposition with violent container rupture. - Aerosol cans may explode on exposure to naked flames. - Rupturing containers may rocket and scatter burning materials. - Hazards may not be restricted to pressure effects. - May emit acrid, poisonous or corrosive fumes. - On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include: carbon dioxide (CO2) nitrogen oxides (NOx) other pyrolysis products typical of burning organic material.
HAZCHEM	Not Applicable

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	- Clean up all spills immediately. - Avoid breathing vapours and contact with skin and eyes. - Wear protective clothing, impervious gloves and safety glasses. - Shut off all possible sources of ignition and increase ventilation. - Wipe up. - If safe, damaged cans should be placed in a container outdoors, away from all ignition sources, until pressure has dissipated. - Undamaged cans should be gathered and stowed safely.
Major Spills	- Clear area of personnel and move upwind. - Alert Fire Brigade and tell them location and nature of hazard. - May be violently or explosively reactive. - Wear breathing apparatus plus protective gloves. - Prevent, by any means available, spillage from entering drains or water courses - No smoking, naked lights or ignition sources. - Increase ventilation. - Stop leak if safe to do so. - Water spray or fog may be used to disperse / absorb vapour.

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	- Absorb or cover spill with sand, earth, inert materials or vermiculite. - If safe, damaged cans should be placed in a container outdoors, away from ignition sources, until pressure has dissipated. - Undamaged cans should be gathered and stowed safely. - Collect residues and seal in labelled drums for disposal.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Precautions for safe handling

Safe handling	- Avoid all personal contact, including inhalation. - Wear protective clothing when risk of exposure occurs. - Use in a well-ventilated area. - Prevent concentration in hollows and sumps. - **DO NOT** enter confined spaces until atmosphere has been checked. - Avoid smoking, naked lights or ignition sources. - Avoid contact with incompatible materials. - When handling, **DO NOT** eat, drink or smoke. - **DO NOT** incinerate or puncture aerosol cans. - **DO NOT** spray directly on humans, exposed food or food utensils. - Avoid physical damage to containers. - Always wash hands with soap and water after handling. - Work clothes should be laundered separately. - Use good occupational work practice. - Observe manufacturer's storage and handling recommendations contained within this SDS. - Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
Other information	- Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can - Store in original containers in approved flammable liquid storage area. - **DO NOT** store in pits, depressions, basements or areas where vapours may be trapped. - No smoking, naked lights, heat or ignition sources. - Keep containers securely sealed. Contents under pressure. - Store away from incompatible materials. - Store in a cool, dry, well ventilated area. - Avoid storage at temperatures higher than 40 deg C. - Store in an upright position. - Protect containers against physical damage. - Check regularly for spills and leaks. - Observe manufacturer's storage and handling recommendations contained within this SDS.

Conditions for safe storage, including any incompatibilities

Suitable container	- Aerosol dispenser. - Check that containers are clearly labelled.
Storage incompatibility	- Avoid oxidising agents, acids, acid chlorides, acid anhydrides, chloroformates. - Avoid strong bases.

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	ethanol	Ethyl alcohol	1000 ppm / 1880 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	isopropanol	Isopropyl alcohol	400 ppm / 983 mg/m3	1230 mg/m3 / 500 ppm	Not Available	Not Available
Australia Exposure Standards	morpholine	Morpholine	20 ppm / 71 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	hydrocarbon propellant	LPG (liquified petroleum gas)	1000 ppm / 1800 mg/m3	Not Available	Not Available	Not Available

Emergency Limits

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
ethanol	Ethanol: (Ethyl alcohol)	Not Available	Not Available	15000* ppm
isopropanol	Isopropyl alcohol	400 ppm	2000* ppm	12000** ppm
sodium nitrite	Sodium nitrite	6.4 mg/m3	71 mg/m3	240 mg/m3
morpholine	Morpholine	30 ppm	1,300 ppm	8000** ppm
hydrocarbon propellant	Liquified petroleum gas; (L.P.G.)	65,000 ppm	2.30E+05 ppm	4.00E+05 ppm

Ingredient	Original IDLH	Revised IDLH
ethanol	3,300 ppm	Not Available
isopropanol	2,000 ppm	Not Available
sodium nitrite	Not Available	Not Available
benzyl C12-14 alkyldimethylammonium chloride	Not Available	Not Available

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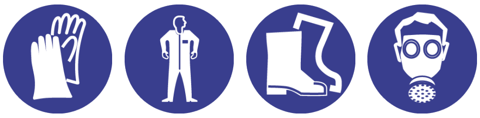
Ingredient	**Original IDLH**	**Revised IDLH**
morpholine	1,400 ppm	Not Available
hydrocarbon propellant	2,000 ppm	Not Available

Occupational Exposure Banding

Ingredient	**Occupational Exposure Band Rating**	**Occupational Exposure Band Limit**
sodium nitrite	E	≤ 0.01 mg/m³
benzyl C12-14 alkyldimethylammonium chloride	E	≤ 0.01 mg/m³
Notes:	*Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.*	

Exposure controls

<table>
<tr><td>Appropriate engineering controls</td><td>Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.
The basic types of engineering controls are:
Process controls which involve changing the way a job activity or process is done to reduce the risk.
Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.
Employers may need to use multiple types of controls to prevent employee overexposure.

General exhaust is adequate under normal conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection.
Provide adequate ventilation in warehouse or closed storage areas.
Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.
<table>
<tr><td>Type of Contaminant:</td><td>Speed:</td></tr>
<tr><td>aerosols, (released at low velocity into zone of active generation)</td><td>0.5-1 m/s</td></tr>
<tr><td>direct spray, spray painting in shallow booths, gas discharge (active generation into zone of rapid air motion)</td><td>1-2.5 m/s (200-500 f/min.)</td></tr>
</table>
Within each range the appropriate value depends on:
<table>
<tr><td>Lower end of the range</td><td>Upper end of the range</td></tr>
<tr><td>1: Room air currents minimal or favourable to capture</td><td>1: Disturbing room air currents</td></tr>
<tr><td>2: Contaminants of low toxicity or of nuisance value only.</td><td>2: Contaminants of high toxicity</td></tr>
<tr><td>3: Intermittent, low production.</td><td>3: High production, heavy use</td></tr>
<tr><td>4: Large hood or large air mass in motion</td><td>4: Small hood-local control only</td></tr>
</table>
Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.</td></tr>
<tr><td>Personal protection</td><td></td></tr>
<tr><td>Eye and face protection</td><td>No special equipment for minor exposure i.e. when handling small quantities.
OTHERWISE: For potentially moderate or heavy exposures:
Safety glasses with side shields.
NOTE: Contact lenses pose a special hazard; soft lenses may absorb irritants and ALL lenses concentrate them.</td></tr>
<tr><td>Skin protection</td><td>See Hand protection below</td></tr>
<tr><td>Hands/feet protection</td><td>No special equipment needed when handling small quantities.
OTHERWISE:
For potentially moderate exposures:
Wear general protective gloves, eg. light weight rubber gloves.
For potentially heavy exposures:
Wear chemical protective gloves, eg. PVC. and safety footwear.</td></tr>
<tr><td>Body protection</td><td>See Other protection below</td></tr>
<tr><td>Other protection</td><td>No special equipment needed when handling small quantities.
OTHERWISE:
Overalls.
Skin cleansing cream.
Eyewash unit.
Do not spray on hot surfaces.
The clothing worn by process operators insulated from earth may develop static charges far higher (up to 100 times) than the minimum ignition energies for various flammable gas-air mixtures. This holds true for a wide range of clothing materials including cotton.
Avoid dangerous levels of charge by ensuring a low resistivity of the surface material worn outermost.
BRETHERICK: Handbook of Reactive Chemical Hazards.</td></tr>
</table>

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

Respiratory protection

Type KAX-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

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***"*Forsberg Clothing Performance Index"*.**
The effect(s) of the following substance(s) are taken into account in the ***computer-generated*** selection:
Homebright Disinfectant Spray - Country Scent

Material	**CPI**
BUTYL	C
NAT+NEOPR+NITRILE	C
NATURAL RUBBER	C
NATURAL+NEOPRENE	C
NEOPRENE	C
NITRILE	C
NITRILE+PVC	C
PE/EVAL/PE	C
PVA	C
PVC	C

* CPI - Chemwatch Performance Index
A: Best Selection
B: Satisfactory; may degrade after 4 hours continuous immersion
C: Poor to Dangerous Choice for other than short term immersion
NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -
* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.
Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	**Half-Face Respirator**	**Full-Face Respirator**	**Powered Air Respirator**
up to 10 x ES	KAX-AUS P2	-	KAX-PAPR-AUS / Class 1 P2
up to 50 x ES	-	KAX-AUS / Class 1 P2	-
up to 100 x ES	-	KAX-2 P2	KAX-PAPR-2 P2 ^

^ - Full-face
A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

- Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

Aerosols, in common with most vapours/ mists, should never be used in confined spaces without adequate ventilation. Aerosols, containing agents designed to enhance or mask smell, have triggered allergic reactions in predisposed individuals.

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Clear to light yellow highly flammable liquid with linen, citrus or country fragrance odour; mixes with water.

Physical state	Liquid	**Relative density (Water = 1)**	Not Available
Odour	Not Available	**Partition coefficient n-octanol / water**	Not Available
Odour threshold	Not Available	**Auto-ignition temperature (°C)**	Not Available
pH (as supplied)	8.76 @25C	**Decomposition temperature**	Not Available
Melting point / freezing point (°C)	Not Available	**Viscosity (cSt)**	3.28 @20C
Initial boiling point and boiling range (°C)	Not Available	**Molecular weight (g/mol)**	Not Applicable
Flash point (°C)	Not Available	**Taste**	Not Available
Evaporation rate	Not Available	**Explosive properties**	Not Available
Flammability	Not Available	**Oxidising properties**	Not Available
Upper Explosive Limit (%)	Not Available	**Surface Tension (dyn/cm or mN/m)**	Not Available
Lower Explosive Limit (%)	Not Available	**Volatile Component (%vol)**	Not Available
Vapour pressure (kPa)	Not Available	**Gas group**	Not Available
Solubility in water	Miscible	**pH as a solution (1%)**	Not Available
Vapour density (Air = 1)	Not Available	**VOC g/L**	Not Available

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	Elevated temperatures. Presence of open flame. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

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SECTION 11 Toxicological information

Information on toxicological effects

Inhaled	Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination. **WARNING**:Intentional misuse by concentrating/inhaling contents may be lethal.
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual. Not normally a hazard due to physical form of product.
Skin Contact	The material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering. Spray mist may produce discomfort Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain.
Chronic	There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. There is some evidence that inhaling this product is more likely to cause a sensitisation reaction in some persons compared to the general population. There is limited evidence that, skin contact with this product is more likely to cause a sensitisation reaction in some persons compared to the general population. Laboratory (in vitro) and animal studies show, exposure to the material may result in a possible risk of irreversible effects, with the possibility of producing mutation. **WARNING**: Aerosol containers may present pressure related hazards.

	TOXICITY	**IRRITATION**
Homebright Disinfectant Spray - Country Scent	Not Available	Not Available

	TOXICITY	**IRRITATION**
ethanol	1.40 mg/kg[2]	Eye (rabbit): 500 mg SEVERE
	1400 mg/kg[2]	Eye (rabbit):100mg/24hr-moderate
	4070 mg/kg[2]	Eye: adverse effect observed (irritating)[1]
	4070 mg/kg[2]	Skin (rabbit):20 mg/24hr-moderate
	5100 mg/kg[2]	Skin (rabbit):400 mg (open)-mild
	6030 mg/kg[2]	Skin: no adverse effect observed (not irritating)[1]
	6030 mg/kg[2]	
	6080 mg/kg[2]	
	6080 mg/kg[2]	
	9200 mg/kg[2]	
	9710 mg/kg[2]	
	Inhalation (rat) LC50: 0 mg/l/10h[2]	
	Inhalation (rat) LC50: 124.7 mg/l/4H[2]	
	Inhalation (rat) LC50: 63926.976 mg/l/4h[2]	
	mg/kg[2]	
	Oral (rat) LD50: =1501 mg/kg[2]	
	Oral (rat) LD50: 7060 mg/kg[2]	

	TOXICITY	**IRRITATION**
isopropanol	223 mg/kg[2]	Eye (rabbit): 10 mg - moderate
	Inhalation (rat) LC50: 72.6 mg/l/4h[2]	Eye (rabbit): 100 mg - SEVERE
	Oral (dog) LD50: =4828 mg/kg[2]	Eye (rabbit): 100mg/24hr-moderate
	Oral (mouse) LD50: =4475 mg/kg[2]	Skin (rabbit): 500 mg - mild
	Oral (mouse) LD50: 3600 mg/kg[2]	
	Oral (rabbit) LD50: 6410 mg/kg[2]	
	Oral (rat) LD50: =4396 mg/kg[2]	
	Oral (rat) LD50: =5045 mg/kg[2]	
	Oral (rat) LD50: =5338 mg/kg[2]	

	TOXICITY	**IRRITATION**
sodium nitrite	1.71 mg/kg[2]	Eye (rabbit): 500 mg/24hr - mild
	14 mg/kg[2]	

Continued...

	71 mg/kg[2]	
	Inhalation (rat) LC50: 0.0055 mg/l/4H[2]	
	Oral (mouse) LD50: =175 mg/kg[2]	
	Oral (mouse) LD50: 214 mg/kg[2]	
	Oral (rat) LD50: =85 mg/kg[2]	
	Oral (rat) LD50: 180 mg/kg[2]	
	Oral (rat) LD50: 200 mg/kg[2]	
benzyl C12-14 alkyldimethylammonium chloride	**TOXICITY**	**IRRITATION**
	Oral (rat) LD50: 447 mg/kg[2]	Eye: adverse effect observed (irreversible damage)[1]
		Skin: adverse effect observed (corrosive)[1]
morpholine	**TOXICITY**	**IRRITATION**
	Dermal (rabbit) LD50: 500 mg/kg[2]	Eye (rabbit): 2 mg - SEVERE
	Inhalation (mouse) LC50: 0.66 mg/l/2h[2]	Skin (rabbit): 995 mg/24hr-SEVERE
	Oral (mouse) LD50: =525 mg/kg[2]	Skin (rabbit):500mg open-moderate
	Oral (rat) LD50: 1050 mg/kg[2]	
hydrocarbon propellant	**TOXICITY**	**IRRITATION**
	Not Available	Not Available
Legend:	*1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances*	

ISOPROPANOL	Isopropanol is irritating to the eyes, nose and throat but generally not to the skin. Prolonged high dose exposure may also produce depression of the central nervous system and drowsiness. Few have reported skin irritation. It can be absorbed from the skin or when inhaled. Intentional swallowing is common particularly among alcoholics or suicide victims and also leads to fainting, breathing difficulty, nausea, vomiting and headache. In the absence of unconsciousness, recovery usually occurred. Repeated doses may damage the kidneys. A decrease in the frequency of mating has been found in among animals, and newborns have been found to have a greater incidence of low birth weight. Tumours of the testes have been observed in the male rat.
SODIUM NITRITE	Tumorigenic - Carcinogenic by RTECS criteria. Laboratory (in vitro) and animal studies show, exposure to the material may result in a possible risk of irreversible effects, with the possibility of producing mutation. The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
BENZYL C12-14 ALKYLDIMETHYLAMMONIUM CHLORIDE	For acid mists, aerosols, vapours Test results suggest that eukaryotic cells are susceptible to genetic damage when the pH falls to about 6.5. Cells from the respiratory tract have not been examined in this respect. Mucous secretion may protect the cells of the airway from direct exposure to inhaled acidic mists (which also protects the stomach lining from the hydrochloric acid secreted there). Alkyldimethylbenzylammonium chlorides are in the list of dangerous substances of council directive, classified as "harmful in contact with skin and on ingestion", and "corrosive and very toxic to aquatic organisms". It can cause dose dependent skin and eye irritation with possible deterioration of vision, possible sensitisation in those with pre-existing eczema. It does not cause cancer, genetic defect, foetal or developmental abnormality. For similar compound benzyl C12-18 alkyldimethyl ammonium chloride CAS RN 68391-01-5:
MORPHOLINE	The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. for morpholine: There have been no reports on incidents of acute poisoning or on the effects of short- or long-term exposure to morpholine by the general population. The phenomenon known as blue vision or glaucopsia, as well as some instances of skin and respiratory tract irritation, have been described in reports of occupational exposure to morpholine; however, no atmospheric concentrations of morpholine were given. It was reported that the number of chromosomal aberrations in the lymphocytes of peripheral blood of workers exposed for 3-10 years to morpholine at concentrations of 0.54-0.93 mg/m3 did not differ significantly from controls. Undiluted morpholine is strongly irritant to skin; a dilute solution (1 to 40) was mildly irritant. The potential carcinogenicity of morpholine in exposed human populations has not been investigated. Morpholine is absorbed after oral, dermal and inhalation exposure. In the rat following oral and intravenous administration, morpholine is rapidly distributed, the highest concentrations being found in the intestine and muscle. In the rabbit, following intravenous and inhalation exposure, morpholine is preferentially distributed to the kidneys, lower concentrations reaching the lung, liver and blood. Morpholine does not bind significantly to plasma proteins. Plasma half-lives have been reported to be 115 (rat), 120 (hamster), and 300 min (guinea-pig). Morpholine is excreted mainly via the renal route, as the unchanged compound, in a variety of species. One day after administration, 70-90% of morpholine was found in urine. Neutralisation of morpholine enhances the rate of excretion of the compound. A small percentage of morpholine is excreted in expired air and faeces. Studies in rats, mice, hamster and rabbit indicate that morpholine is eliminated almost completely as the unmetabolised compound. In the guinea-pig, *N*-methylation followed by N-oxidation can occur, with up to 20% of the administered dose being metabolized. In the presence of nitrite, morpholine can be converted to NMOR both *in vitro* and *in vivo.* Depending on the dose, 0-12% of morpholine administered to rats with nitrites may be nitrosated. Immunostimulation, involving macrophage activation, may increase the extent of nitrosation. Morpholine is not highly toxic under conditions of acute exposure. The LD50 after oral administration is 1-1.9 g/kg body weight in rats and 0.9 g/kg body weight in guinea-pigs. LC50 values of 7.8 mg/m3 (rats) and 4.9-6.9 g/m3 (mice) have been reported. In the conditions of short-term and long-term inhalation exposure, the critical effects appear to be irritation of the eyes and respiratory tract. A concentration of 90 mg/m3 may be considered the NOAEL in the conditions of the 13-week experiment in rats (6 h/day, 5 days/week). In a long-term inhalation study (104 weeks), increased incidences of inflammation of the cornea, and inflammation and necrosis of the nasal cavity were observed in rats at 540 mg/m3. Increased incidence of irritation of eyes and nose was also observed at 36 and 180 mg/m3. High exposures to morpholine causes severe damage to the liver and kidneys of rats and guinea-pigs. Fatty degeneration of the liver was reported in rats after feeding morpholine (0.5 g/kg body weight) daily for 56 days. When administered morpholine oleic acid salt in the drinking-water at a dose of about 0.7 g/kg body weight per day for 13 weeks, mice showed cloudy swelling of the kidney proximal tubules. Decreased body weight gain was observed in female mice in the long- term (672 days) feeding experiment at dose levels between 0.05 and 0.4 g morpholine (as oleic acid salt). At the reported levels of the present occupational and environmental exposures, morpholine does not seem to create any significant risk of systemic toxic effects. Local effects (irritation) of the eyes and respiratory tract may occur in non-controlled occupational and incidental exposures to high concentrations of

Continued...

	airborne morpholine, and skin irritation may result from contact with liquid (even diluted) morpholine. Morpholine does not appear to be mutagenic or carcinogenic in animals. However, it can be easily nitrosated to form NMOR, which is mutagenic and carcinogenic in several species of experimental animals. Morpholine fed to rats sequentially with nitrite caused an increase in tumours, mostly hepatocellular carcinoma and sarcomas of the liver and lungs. It is therefore prudent to consider exposure to morpholine as increasing the carcinogenic risk in exposed populations.
HYDROCARBON PROPELLANT	No significant acute toxicological data identified in literature search. inhalation of the gas
ETHANOL & ISOPROPANOL	The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.
ISOPROPANOL & BENZYL C12-14 ALKYLDIMETHYLAMMONIUM CHLORIDE & MORPHOLINE	Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of exposure due to high concentrations of irritating substance (often particles) and is completely reversible after exposure ceases. The disorder is characterized by difficulty breathing, cough and mucus production.
ISOPROPANOL & MORPHOLINE	The substance is classified by IARC as Group 3: **NOT** classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing.
BENZYL C12-14 ALKYLDIMETHYLAMMONIUM CHLORIDE & MORPHOLINE	The material may cause severe skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Repeated exposures may produce severe ulceration.

Acute Toxicity	✗	**Carcinogenicity**	✗
Skin Irritation/Corrosion	✓	**Reproductivity**	✗
Serious Eye Damage/Irritation	✓	**STOT - Single Exposure**	✗
Respiratory or Skin sensitisation	✗	**STOT - Repeated Exposure**	✗
Mutagenicity	✓	**Aspiration Hazard**	✗

Legend: ✗ *– Data either not available or does not fill the criteria for classification*
✓ *– Data available to make classification*

SECTION 12 Ecological information

Toxicity

Homebright Disinfectant Spray - Country Scent

Endpoint	Test Duration (hr)	Species	Value	Source
Not Available	Not Available	Not Available	Not Available	Not Available

ethanol

Endpoint	Test Duration (hr)	Species	Value	Source
LC50	96	Fish	11-mg/L	2
EC50	48	Crustacea	>10-mg/L	2
EC50	96	Algae or other aquatic plants	ca.22-mg/L	2
NOEC	168	Algae or other aquatic plants	1-296mg/L	2

isopropanol

Endpoint	Test Duration (hr)	Species	Value	Source
LC50	96	Fish	9-640mg/L	2
EC50	48	Crustacea	12500mg/L	5
EC50	72	Algae or other aquatic plants	>1000mg/L	1
EC0	24	Crustacea	5-102mg/L	2
NOEC	504	Crustacea	=30mg/L	1

sodium nitrite

Endpoint	Test Duration (hr)	Species	Value	Source
LC50	96	Fish	35mg/L	2
EC50	48	Crustacea	ca.12.5100mg/L	1
EC50	72	Algae or other aquatic plants	>100mg/L	2
NOEC	1176	Fish	0.05mg/L	1

benzyl C12-14 alkyldimethylammonium chloride

Endpoint	Test Duration (hr)	Species	Value	Source
LC50	96	Fish	0.515mg/L	2
EC50	48	Crustacea	0.016mg/L	2
EC50	96	Algae or other aquatic plants	0.01mg/L	2
EC10	96	Algae or other aquatic plants	0.002mg/L	2
NOEC	72	Algae or other aquatic plants	<=0.0012mg/L	2

Continued...

	Endpoint	Test Duration (hr)	Species	Value	Source
morpholine	LC50	96	Fish	179mg/L	2
	EC50	48	Crustacea	45mg/L	2
	EC50	96	Algae or other aquatic plants	=28mg/L	1
	NOEC	504	Crustacea	5mg/L	2

	Endpoint	Test Duration (hr)	Species	Value	Source
hydrocarbon propellant	LC50	96	Fish	24.11mg/L	2
	EC50	96	Algae or other aquatic plants	7.71mg/L	2
	LC50	96	Fish	24.11mg/L	2
	EC50	96	Algae or other aquatic plants	7.71mg/L	2

Legend: *Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data*

Harmful to aquatic organisms.
DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
ethanol	LOW (Half-life = 2.17 days)	LOW (Half-life = 5.08 days)
isopropanol	LOW (Half-life = 14 days)	LOW (Half-life = 3 days)
sodium nitrite	LOW	LOW
morpholine	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
ethanol	LOW (LogKOW = -0.31)
isopropanol	LOW (LogKOW = 0.05)
sodium nitrite	LOW (LogKOW = 0.0564)
morpholine	LOW (BCF = 2.8)

Mobility in soil

Ingredient	Mobility
ethanol	HIGH (KOC = 1)
isopropanol	HIGH (KOC = 1.06)
sodium nitrite	LOW (KOC = 23.74)
morpholine	LOW (KOC = 5.082)

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging disposal

- **DO NOT** allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- Consult State Land Waste Management Authority for disposal.
- Discharge contents of damaged aerosol cans at an approved site.
- Allow small quantities to evaporate.
- **DO NOT** incinerate or puncture aerosol cans.
- Bury residues and emptied aerosol cans at an approved site.

SECTION 14 Transport information

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG)

UN number	1950

Continued...

UN proper shipping name	AEROSOLS	
Transport hazard class(es)	Class	2.1
	Subrisk	Not Applicable
Packing group	Not Applicable	
Environmental hazard	Not Applicable	
Special precautions for user	Special provisions	63 190 277 327 344 381
	Limited quantity	1000ml

Air transport (ICAO-IATA / DGR)

UN number	1950	
UN proper shipping name	Aerosols, flammable	
Transport hazard class(es)	ICAO/IATA Class	2.1
	ICAO / IATA Subrisk	Not Applicable
	ERG Code	10L
Packing group	Not Applicable	
Environmental hazard	Not Applicable	
Special precautions for user	Special provisions	A145 A167 A802
	Cargo Only Packing Instructions	203
	Cargo Only Maximum Qty / Pack	150 kg
	Passenger and Cargo Packing Instructions	203
	Passenger and Cargo Maximum Qty / Pack	75 kg
	Passenger and Cargo Limited Quantity Packing Instructions	Y203
	Passenger and Cargo Limited Maximum Qty / Pack	30 kg G

Sea transport (IMDG-Code / GGVSee)

UN number	1950	
UN proper shipping name	AEROSOLS	
Transport hazard class(es)	IMDG Class	2.1
	IMDG Subrisk	Not Applicable
Packing group	Not Applicable	
Environmental hazard	Not Applicable	
Special precautions for user	EMS Number	F-D , S-U
	Special provisions	63 190 277 327 344 381 959
	Limited Quantities	1000 ml

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 Regulatory information

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

ethanol is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australian Inventory of Industrial Chemicals (AIIC)

isopropanol is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australian Inventory of Industrial Chemicals (AIIC)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

sodium nitrite is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 2

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 7

Australian Inventory of Industrial Chemicals (AIIC)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2A: Probably carcinogenic to humans

benzyl C12-14 alkyldimethylammonium chloride is found on the following regulatory lists

Continued...

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
Australian Inventory of Industrial Chemicals (AIIC)

morpholine is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

hydrocarbon propellant is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)
Chemical Footprint Project - Chemicals of High Concern List

National Inventory Status

National Inventory	Status
Australia - AIIC	Yes
Australia - Non-Industrial Use	No (ethanol; isopropanol; sodium nitrite; benzyl C12-14 alkyldimethylammonium chloride; morpholine; hydrocarbon propellant)
Canada - DSL	Yes
Canada - NDSL	No (ethanol; isopropanol; sodium nitrite; benzyl C12-14 alkyldimethylammonium chloride; morpholine; hydrocarbon propellant)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	No (benzyl C12-14 alkyldimethylammonium chloride)
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	No (benzyl C12-14 alkyldimethylammonium chloride)
Taiwan - TCSI	Yes
Mexico - INSQ	No (benzyl C12-14 alkyldimethylammonium chloride)
Vietnam - NCI	Yes
Russia - ARIPS	No (benzyl C12-14 alkyldimethylammonium chloride)
Legend:	*Yes = All CAS declared ingredients are on the inventory* *No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)*

SECTION 16 Other information

Revision Date	22/10/2020
Initial Date	06/03/2020

SDS Version Summary

Version	Issue Date	Sections Updated
4.1.1.1	07/03/2020	Classification change due to full database hazard calculation/update.
5.1.1.1	22/10/2020	Classification, Supplier Information, Synonyms

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC－TWA: Permissible Concentration-Time Weighted Average
PC－STEL: Permissible Concentration-Short Term Exposure Limit
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Governmental Industrial Hygienists
STEL: Short Term Exposure Limit
TEEL: Temporary Emergency Exposure Limit。
IDLH: Immediately Dangerous to Life or Health Concentrations
OSF: Odour Safety Factor
NOAEL :No Observed Adverse Effect Level
LOAEL: Lowest Observed Adverse Effect Level
TLV: Threshold Limit Value
LOD: Limit Of Detection
OTV: Odour Threshold Value
BCF: BioConcentration Factors
BEI: Biological Exposure Index

end of SDS