

9056  
8342

# JOHNSON & JOHNSON MICROSIELD ANTIMICROBIAL HAND GEL

Chemwatch Independent Material Safety Data Sheet  
Issue Date: 27-Nov-2009  
NC317ECP

CHEMWATCH 4814-78  
Version No:7  
CD 2009/3 Page 1 of 12

---

## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

---

### PRODUCT NAME

JOHNSON & JOHNSON MICROSIELD ANTIMICROBIAL HAND GEL

### PROPER SHIPPING NAME

ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

### PRODUCT USE

Sanitising hands for infection control.

### SUPPLIER

Company: Johnson & Johnson Medical Pty Ltd  
Address:  
1- 5 Khartoum Road  
North Ryde  
NSW, 2113  
AUS  
Telephone: +61 2 9878 9000  
Telephone: 1800 257 210  
Emergency Tel: 13 11 26  
Emergency Tel: +64 3 474 7000 NZ  
Fax: 1800 808 233

Company: Johnson & Johnson Medical Pty Ltd  
Address:  
PO Box 134  
North Ryde  
NSW, 2113  
AUS

---

## Section 2 - HAZARDS IDENTIFICATION

---

### STATEMENT OF HAZARDOUS NATURE

HAZARDOUS SUBSTANCE. DANGEROUS GOODS. According to NOHSC Criteria, and ADG Code.

### POISONS SCHEDULE

None

### RISK

Risk Codes  
R10  
R36

#### Risk Phrases

- Flammable.
- Irritating to eyes.

### SAFETY

Safety Codes  
S401

#### Safety Phrases

S46

- To clean the floor and all objects contaminated by this material use water and detergent.

S60

- If swallowed IMMEDIATELY contact Doctor or Poisons Information Centre (show this container or label).
- This material and its container must be disposed of as hazardous waste.

continued...

# JOHNSON & JOHNSON MICROSIELD ANTIMICROBIAL HAND GEL

Chemwatch Independent Material Safety Data Sheet

Issue Date: 27-Nov-2009

NC317ECP

CHEMWATCH 4814-78

Version No:7

CD 2009/3 Page 2 of 12

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
ethanol, as		
alcohol, denatured	64-17-5	61.5
glycol ether		<10
amino alcohol		<10
quaternary ammonium compound		<10
other ingredients determined not to be hazardous		<10
water	7732-18-5	30-60

## Section 4 - FIRST AID MEASURES

### SWALLOWED

- - 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.

### EYE

- If this product comes in contact with the eyes:
- Wash out immediately 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.
- 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.

### SKIN

- No adverse effects anticipated from normal use.
- If unintended skin contact occurs:
- Immediately remove all contaminated clothing, including footwear.
  - Flush skin and hair with running water (and soap if available).
  - Seek medical attention in event of irritation.

### INHALED

- - If fumes or combustion products are inhaled remove from contaminated area.
- 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.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- Transport to hospital, or doctor.

### NOTES TO PHYSICIAN

- Treat symptomatically.
- For acute or short term repeated exposures to ethanol:
- Acute ingestion in non-tolerant patients usually responds to supportive care with special attention to prevention of aspiration, replacement of fluid and correction of nutritional deficiencies (magnesium, thiamine pyridoxine, Vitamins C and K).
  - Give 50% dextrose (50-100 ml) IV to obtunded patients following blood draw for glucose determination.
  - Comatose patients should be treated with initial attention to airway, breathing, circulation and drugs of immediate importance (glucose, thiamine).
  - Decontamination is probably unnecessary more than 1 hour after a single observed ingestion. Cathartics and

continued...

# JOHNSON & JOHNSON MICROSHIELD ANTIMICROBIAL HAND GEL

Chemwatch Independent Material Safety Data Sheet

Issue Date: 27-Nov-2009

NC317ECP

CHEMWATCH 4814-78

Version No:7

CD 2009/3 Page 3 of 12

Section 4 - FIRST AID MEASURES

charcoal may be given but are probably not effective in single ingestions.

- Fructose administration is contra-indicated due to side effects.

## Section 5 - FIRE FIGHTING MEASURES

### EXTINGUISHING MEDIA

- - Alcohol stable foam.
- Dry chemical powder.
- Carbon dioxide.
- Water spray or fog - Large fires only.

### 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.
- Avoid spraying water onto liquid pools.
- 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.

When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 500 metres in all directions.

### FIRE/EXPLOSION HAZARD

- - Liquid and vapour are flammable.
  - Moderate fire hazard when exposed to heat or flame.
  - Vapour forms an explosive mixture with air.
  - Moderate explosion hazard when exposed to heat or flame.
  - Vapour may travel a considerable distance to source of ignition.
  - Heating may cause expansion or decomposition leading to violent rupture of containers.
  - On combustion, may emit toxic fumes of carbon monoxide (CO).
- Combustion products include: carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), other pyrolysis products typical of burning organic material.

### FIRE INCOMPATIBILITY

- Avoid contamination with strong oxidising agents as ignition may result.

### HAZCHEM: •2Y

### PERSONAL PROTECTION

Glasses:

Not normally required.

Chemical goggles.

Gloves:

When handling larger quantities:

PVC chemical resistant type.

Respirator:

Type A Filter of sufficient capacity

continued...

# JOHNSON & JOHNSON MICROSHIELD ANTIMICROBIAL HAND GEL

Chemwatch Independent Material Safety Data Sheet

Issue Date: 27-Nov-2009

NC317ECP

CHEMWATCH 4814-78

Version No:7

CD 2009/3 Page 4 of 12

---

## Section 6 - ACCIDENTAL RELEASE MEASURES

---

### MINOR SPILLS

- Slippery when spilt.
- Remove all ignition sources.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact by using protective equipment.
- Contain and absorb small quantities with vermiculite or other absorbent material.
- Wipe up.
- Collect residues in a flammable waste container.

### MAJOR SPILLS

- Slippery when spilt.
- 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 course.
- 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.
- Contain spill with sand, earth or vermiculite.
- Use only spark-free shovels and explosion proof equipment.
- Collect recoverable product into labelled containers for recycling.
- Absorb remaining product with sand, earth or vermiculite.
- Collect solid residues and seal in labelled drums for disposal.
- Wash area and prevent runoff into drains.
- If contamination of drains or waterways occurs, advise emergency services.

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

---

## Section 7 - HANDLING AND STORAGE

---

### PROCEDURE FOR HANDLING

- Remove all ignition sources.
- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- When handling DO NOT eat, drink or smoke.
- Always wash hands with soap and water after handling.
- Avoid physical damage to containers.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.

### SUITABLE CONTAINER

- - Packing as supplied by manufacturer.
- Plastic containers may only be used if approved for flammable liquid.
- Check that containers are clearly labelled and free from leaks.

### STORAGE INCOMPATIBILITY

- Avoid storage with oxidisers.

continued...

# JOHNSON & JOHNSON MICROSIELD ANTIMICROBIAL HAND GEL

## Chemwatch Independent Material Safety Data Sheet

Issue Date: 27-Nov-2009

NC317ECP

CHEMWATCH 4814-78

Version No:7

CD 2009/3 Page 5 of 12

### Section 7 - HANDLING AND STORAGE

#### STORAGE REQUIREMENTS

- - Store in original containers in approved flammable liquid storage area.
  - Store away from incompatible materials in a cool, dry, well-ventilated area.
  - DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
  - No smoking, naked lights, heat or ignition sources.
  - Storage areas should be clearly identified, well illuminated, clear of obstruction and accessible only to trained and authorised personnel - adequate security must be provided so that unauthorised personnel do not have access.
  - Store according to applicable regulations for flammable materials for storage tanks, containers, piping, buildings, rooms, cabinets, allowable quantities and minimum storage distances.
  - Use non-sparking ventilation systems, approved explosion proof equipment and intrinsically safe electrical systems.
  - Have appropriate extinguishing capability in storage area (e.g. portable fire extinguishers - dry chemical, foam or carbon dioxide) and flammable gas detectors.
  - Keep adsorbents for leaks and spills readily available.
  - Protect containers against physical damage and check regularly for leaks.
  - Observe manufacturer's storing and handling recommendations.
- In addition, for tank storages (where appropriate):
- Store in grounded, properly designed and approved vessels and away from incompatible materials.
  - For bulk storages, consider use of floating roof or nitrogen blanketed vessels; where venting to atmosphere is possible, equip storage tank vents with flame arrestors; inspect tank vents during winter conditions for vapour/ ice build-up.
  - Storage tanks should be above ground and diked to hold entire contents.

### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

#### EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m <sup>3</sup>
Australia Exposure Standards	alcohol, denatured (Ethyl alcohol)	1000	1880

The following materials had no OELs on our records

- water: CAS:7732- 18- 5

#### EMERGENCY EXPOSURE LIMITS

Material	Revised IDLH Value (mg/m3)	Revised IDLH Value (ppm)
alcohol, denatured		3, 300 [LEL]

#### NOTES

Values marked LEL indicate that the IDLH was based on 10% of the lower explosive limit for safety considerations even though the relevant toxicological data indicated that irreversible health effects or impairment of escape existed only at higher concentrations.

#### MATERIAL DATA

JOHNSON & JOHNSON MICROSIELD ANTIMICROBIAL HAND GEL:

None assigned.

#### ALCOHOL, DENATURED:

■ Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations. Present day expectations require that nearly every individual should be protected against even minor sensory irritation and exposure standards are established using uncertainty factors or safety factors of 5 to 10 or more. On occasion animal no-observable-effect-levels (NOEL) are used to determine these limits where human results are unavailable. An additional approach,

continued...

## JOHNSON & JOHNSON MICROSIELD ANTIMICROBIAL HAND GEL

Chemwatch Independent Material Safety Data Sheet

Issue Date: 27-Nov-2009

NC317ECP

CHEMWATCH 4814-78

Version No:7

CD 2009/3 Page 6 of 12

### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

typically used by the TLV committee (USA) in determining respiratory standards for this group of chemicals, has been to assign ceiling values (TLV C) to rapidly acting irritants and to assign short-term exposure limits (TLV STELs) when the weight of evidence from irritation, bioaccumulation and other endpoints combine to warrant such a limit. In contrast the MAK Commission (Germany) uses a five-category system based on intensive odour, local irritation, and elimination half-life. However this system is being replaced to be consistent with the European Union (EU) Scientific Committee for Occupational Exposure Limits (SCOEL); this is more closely allied to that of the USA.

OSHA (USA) concluded that exposure to sensory irritants can:

- cause inflammation
- cause increased susceptibility to other irritants and infectious agents
- lead to permanent injury or dysfunction
- permit greater absorption of hazardous substances and
- acclimate the worker to the irritant warning properties of these substances thus increasing the risk of

overexposure.

For ethanol:

Odour Threshold Value: 49-716 ppm (detection), 101 ppm (recognition)

Eye and respiratory tract irritation do not appear to occur at exposure levels of less than 5000 ppm and the TLV-TWA is thought to provide an adequate margin of safety against such effects. Experiments in man show that inhalation of 1000 ppm caused slight symptoms of poisoning and 5000 ppm caused strong stupor and morbid sleepiness. Subjects exposed to 5000 ppm to 10000 ppm experienced smarting of the eyes and nose and coughing. Symptoms disappeared within minutes. Inhalation also causes local irritating effects to the eyes and upper respiratory tract, headaches, sensation of heat intraocular tension, stupor, fatigue and a need to sleep. At 15000 ppm there was continuous lachrymation and coughing.

WATER:

- No exposure limits set by NOHSC or ACGIH.

### PERSONAL PROTECTION

#### EYE

- No special equipment for minor exposure i.e. when handling small quantities.

- OTHERWISE:

- Safety glasses with side shields.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

#### HANDS/FEET

- None under normal operating conditions.

OTHERWISE:.

Wear protective gloves, eg. PVC.

#### OTHER

- None under normal operating conditions.

OTHERWISE:.

- Overalls.
- Eyewash unit.

#### RESPIRATOR

- Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

continued...

# JOHNSON & JOHNSON MICROSHIELD ANTIMICROBIAL HAND GEL

## Chemwatch Independent Material Safety Data Sheet

Issue Date: 27-Nov-2009

NC317ECP

CHEMWATCH 4814-78

Version No:7

CD 2009/3 Page 7 of 12

### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Breathing Zone Level ppm (volume)	Maximum Protection Factor	Half- face Respirator	Full- Face Respirator
1000	10	A- AUS	-
1000	50	-	A- AUS
5000	50	Airline *	-
5000	100	-	A- 2
10000	100	-	A- 3
	100+		Airline**

\* - Continuous Flow

\*\* - Continuous-flow or positive pressure demand.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required. For further information consult site specific CHEMWATCH data (if available), or your Occupational Health and Safety Advisor.

### ENGINEERING CONTROLS

■ For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant.

### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

#### APPEARANCE

White slightly viscous flammable liquid with a characteristic seafoam fragrance; mixes with water

#### PHYSICAL PROPERTIES

Liquid.

Mixes with water.

Molecular Weight: Not Applicable	Boiling Range (°C): Not Available	Melting Range (°C): Not Applicable
Specific Gravity (water=1): 0.89- 0.91 @ 25C	Solubility in water (g/L): Miscible	pH (as supplied): 6.5- 7.0
pH (1% solution): Not Available	Vapour Pressure (kPa): Not Available	Volatile Component (%vol): Not Available
Evaporation Rate: Not Available	Relative Vapour Density (air=1): Not Available	Flash Point (°C): 25
Lower Explosive Limit (%): 3.3	Upper Explosive Limit (%): 19	Autoignition Temp (°C): Not Available
Decomposition Temp (°C): Not Available	State: Gel	Viscosity: Not Available

### Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

#### CONDITIONS CONTRIBUTING TO INSTABILITY

■ - Presence of incompatible materials.

- Product is considered stable.

- Hazardous polymerisation will not occur.

*For incompatible materials - refer to Section 7 - Handling and Storage.*

continued...

# JOHNSON & JOHNSON MICROSHIELD ANTIMICROBIAL HAND GEL

Chemwatch Independent Material Safety Data Sheet

Issue Date: 27-Nov-2009

NC317ECP

CHEMWATCH 4814-78

Version No:7

CD 2009/3 Page 8 of 12

## Section 11 - TOXICOLOGICAL INFORMATION

### POTENTIAL HEALTH EFFECTS

#### ACUTE HEALTH EFFECTS

##### SWALLOWED

■ Accidental ingestion of the material may be damaging to the health of the individual.

Ingestion of ethanol (ethyl alcohol, "alcohol") may produce nausea, vomiting, bleeding from the digestive tract, abdominal pain, and diarrhoea. Effects on the body:

Blood concentration  
<1.5 g/L

1.5- 3.0 g/L

##### Effects

Mild: impaired vision, co- ordination and reaction time; emotional instability

Moderate: Slurred speech, confusion, inco-ordination, emotional instability, disturbances in perception and senses, possible blackouts, and impaired objective performance in standardized tests. Possible double vision, flushing, fast heart rate, sweating and incontinence. Slow breathing may occur rarely and fast breathing may develop in cases of metabolic acidosis, low blood sugar and low blood potassium. Central nervous system depression may progress to coma.

Severe: cold clammy skin, low body temperature and low blood pressure. Atrial fibrillation and heart block have been reported. Depression of breathing may occur, respiratory failure may follow serious poisoning, choking on vomit may result in lung inflammation and swelling. Convulsions due to severe low blood sugar may also occur. Acute liver inflammation may develop.

3- 5 g/L

##### EYE

■ The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

##### SKIN

■ 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.

Not considered an irritant through normal use.

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.

##### INHALED

■ Acute effects from inhalation of high vapour concentrations may be chest and nasal irritation with coughing, sneezing, headache and even nausea.

Inhalation of vapour is more likely at higher than normal temperatures.

#### CHRONIC HEALTH EFFECTS

■ Prolonged exposure to ethanol may cause damage to the liver and cause scarring. It may also worsen damage caused by other agents. Large amounts of ethanol taken in pregnancy may result in "foetal alcohol syndrome",

continued...



## JOHNSON & JOHNSON MICROSIELD ANTIMICROBIAL HAND GEL

Chemwatch Independent Material Safety Data Sheet

Issue Date: 27-Nov-2009

NC317ECP

CHEMWATCH 4814-78

Version No:7

CD 2009/3 Page 9 of 12

### Section 11 - TOXICOLOGICAL INFORMATION

characterised by delay in mental and physical development, learning difficulties, behavioural problems and small head size. A small number of people develop allergic reactions to ethanol, which include eye infections, skin swelling, shortness of breath, and itchy rashes with blisters.

#### TOXICITY AND IRRITATION

■ Not available. Refer to individual constituents.

#### ALCOHOL, DENATURED:

■ unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

■ The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

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.

#### WATER:

■ No significant acute toxicological data identified in literature search.

#### CARCINOGEN

Ethanol in alcoholic beverages

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

Group

1

### Section 12 - ECOLOGICAL INFORMATION

Refer to data for ingredients, which follows:

#### JOHNSON & JOHNSON MICROSIELD ANTIMICROBIAL HAND GEL:

##### ALCOHOL, DENATURED:

■ DO NOT discharge into sewer or waterways.

#### JOHNSON & JOHNSON MICROSIELD ANTIMICROBIAL HAND GEL:

##### ALCOHOL, DENATURED:

■ When ethanol is released into the soil it readily and quickly biodegrades but may leach into ground water; most is lost by evaporation. When released into water the material readily evaporates and is biodegradable. Ethanol does not bioaccumulate to an appreciable extent.

The material is readily degraded by reaction with photochemically produced hydroxy radicals; release into air will result in photodegradation and wet deposition.

##### Environmental Fate:

**TERRESTRIAL FATE:** An estimated Koc value of 1 indicates that ethanol is expected to have very high mobility in soil. Volatilisation of ethanol from moist soil surfaces is expected to be an important fate process given a Henry's Law constant of  $5 \times 10^{-6}$  atm-m<sup>3</sup>/mole. The potential for volatilization of ethanol from dry soil surfaces may exist based upon an extrapolated vapor pressure of 59.3 mm Hg. Biodegradation is expected to be an important fate process for ethanol based on half-lives on the order of a few days for ethanol in sandy soil/groundwater microcosms.

**AQUATIC FATE:** An estimated Koc value of 1 indicates that ethanol is not expected to adsorb to suspended solids and sediment. Volatilisation from water surfaces is expected based upon a Henry's Law constant of  $5 \times 10^{-6}$  atm-m<sup>3</sup>/mole. Using this Henry's Law constant and an estimation method, volatilisation half-lives for a model river and model lake are 3 and 39 days, respectively. An estimated BCF = 3, from a log Kow of -0.31 suggests bioconcentration in aquatic organisms is low. Hydrolysis and photolysis in sunlit surface waters is not expected to be an important environmental fate process for ethanol since this compound lacks functional groups that hydrolyse or absorb light under environmentally relevant conditions. Ethanol was degraded with half-lives on the order of a few days in aquatic studies conducted using microcosms constructed with a low

continued...

# JOHNSON & JOHNSON MICROSHIELD ANTIMICROBIAL HAND GEL

## Chemwatch Independent Material Safety Data Sheet

Issue Date: 27-Nov-2009

NC317ECP

CHEMWATCH 4814-78

Version No:7

CD 2009/3 Page 10 of 12

### Section 12 - ECOLOGICAL INFORMATION

organic sandy soil and groundwater, indicating it is unlikely to be persistent in aquatic environments(8).  
ATMOSPHERIC FATE: Ethanol, which has an extrapolated vapor pressure of 59.3 mm Hg at 25 deg C, is expected to exist solely as a vapor in the ambient atmosphere. Vapor-phase ethanol is degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals; the half-life for this reaction in air is estimated to be 5 days, calculated from its rate constant of  $3.3 \times 10^{-12}$  m<sup>3</sup>/molecule-sec at 25 deg C.

#### Ecotoxicity:

log Kow : -0.31- -0.32

Half-life (hr) air : 144

Half-life (hr) H<sub>2</sub>O surface water : 144

Henry's atm m<sup>3</sup> /mol: 6.29E-06

BOD 5 if unstated: 0.93-1.67,63%

COD : 1.99-2.11,97%

ThOD : 2.1.

#### Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
Johnson & Johnson Microshield Antimicrobial Hand Gel		No data		
alcohol, denatured	LOW	MED	LOW	HIGH
water	LOW	No data	LOW	HIGH

### Section 13 - DISPOSAL CONSIDERATIONS

- - Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Authority for disposal.
- Bury or incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorised landfill.

### Section 14 - TRANSPORTATION INFORMATION



Labels Required: FLAMMABLE LIQUID

HAZCHEM: ●2Y (ADG7)

#### ADG7:

Class or division:	3	Subsidiary risk:	None
UN No.:	1170	UN packing group:	III
Special provisions:	144, 223	Packing Instructions:	None
Notes:	None	Limited quantities:	5 L
Portable tanks and bulk containers -	T2	Portable tanks and bulk containers - Special provisions:	TP1
Instructions:		Packagings and IBCs -	None
Packagings and IBCs -	P001, IBC03, LP01	Special packing provisions:	
Packing instruction:			

Shipping Name:ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL

continued...

# JOHNSON & JOHNSON MICROSHIELD ANTIMICROBIAL HAND GEL

Chemwatch Independent Material Safety Data Sheet

Issue Date: 27-Nov-2009

NC317ECP

CHEMWATCH 4814-78

Version No:7

CD 2009/3 Page 11 of 12

## Section 14 - TRANSPORTATION INFORMATION

### ALCOHOL SOLUTION)

#### Land Transport UNDG:

Class or division:	3	Subsidiary risk:	None
UN No.:	1170	UN packing group:	III
Shipping Name: ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)			

#### Air Transport IATA:

ICAO/IATA Class:	3	ICAO/IATA Subrisk:	<input type="checkbox"/> <input type="checkbox"/>
UN/ID Number:	1170	Packing Group:	III
Special provisions:	A3		
Shipping Name: ETHANOL			

#### Maritime Transport IMDG:

IMDG Class:	3	IMDG Subrisk:	None
UN Number:	1170	Packing Group:	III
EMS Number:	F- E, S- D	Special provisions:	144 223 330
Limited Quantities:	5 L		
Shipping Name: ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)			

## Section 15 - REGULATORY INFORMATION

**POISONS SCHEDULE:** None

### REGULATIONS

Regulations for ingredients

**alcohol, denatured (CAS: 64-17-5) is found on the following regulatory lists;**

"Australia Exposure Standards", "Australia Hazardous Substances", "Australia High Volume Industrial Chemical List (HVICL)", "Australia Illicit Drug Reagents/Essential Chemicals - Category III", "Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory", "Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 5", "GESAMP/EHS Composite List of Hazard Profiles - Hazard evaluation of substances transported by ships", "IMO IBC Code Chapter 18: List of products to which the Code does not apply", "IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances", "IMO Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures containing at least 99% by weight of components already assessed by IMO", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "International Air Transport Association (IATA) Dangerous Goods Regulations", "International Council of Chemical Associations (ICCA) - High Production Volume List", "OECD Representative List of High Production Volume (HPV) Chemicals"

**water (CAS: 7732-18-5) is found on the following regulatory lists;**

"Australia Inventory of Chemical Substances (AICS)", "GESAMP/EHS Composite List of Hazard Profiles - Hazard evaluation of substances transported by ships", "IMO IBC Code Chapter 18: List of products to which the Code does not apply", "OECD Representative List of High Production Volume (HPV) Chemicals"

**No data for Johnson & Johnson Microshield Antimicrobial Hand Gel (CW: 4814-78)**

## Section 16 - 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.

A list of reference resources used to assist the committee may be found at:  
[www.chemwatch.net/references](http://www.chemwatch.net/references).

■ The (M)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.

continued...

## JOHNSON & JOHNSON MICROSIELD ANTIMICROBIAL HAND GEL

Chemwatch Independent Material Safety Data Sheet

Issue Date: 27-Nov-2009

NC317ECP

CHEMWATCH 4814-78

Version No:7

CD 2009/3 Page 12 of 12

Section 16 - OTHER INFORMATION

---

*This document is copyright. Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH. TEL (+61 3) 9572 4700.*

Issue Date: 27-Nov-2009

Print Date: 27-Nov-2009

*This is the end of the MSDS.*