CG3 Page 1 of 11

Johnson & Johnson Microshield Antimicrobial Hand Gel

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet Version No: 8 Chemwatch 4814-78

Issue Date: 24-Feb-2010 CD 2011/1

NC317TCP

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

Johnson & Johnson Microshield Antimicrobial Hand Gel

PROPER SHIPPING NAME

ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

PRODUCT NUMBERS

22458

PRODUCT USE

■ Used according to manufacturer's directions. Sanitising hands for infection control.

SUPPLIER

Company: Johnson & Johnson Medical Pty Ltd

Address: PO Box 134

North Ryde

NSW, 2113

Australia

Company: Johnson & Johnson Medical Pty Ltd

Address:

1-5 Khartoum Road North Ryde NSW, 2113

Australia

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

Website: http://www.jnjaust.com.au/home.aspx

Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

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

CHEMWATCH HAZARD RATINGS

Flammability: 2

Toxicity: 2

Body Contact: 2

Reactivity: 0

Chronic: 2

Min Max

Max

Min/Nil=0

Low=1

Moderate=2

High=3

Extreme=4

POISONS SCHEDULE

None

RISK

- Flammable.
- Irritating to eyes.
- Vapours may cause drowsiness and dizziness.
- Inhalation and/or ingestion may produce health damage*.
- Cumulative effects may result following exposure*.
- May produce discomfort of the respiratory system*.
- * (limited evidence).

SAFETY

- · Do not breathe dust.
- · Avoid contact with skin.
- · Wear eye/ face protection.
- Use only in well ventilated areas.
- · Keep container in a well ventilated place.
- To clean the floor and all objects contaminated by this material, use water.
- In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.

CG3 Page 2 of 11

Johnson & Johnson Microshield Antimicrobial Hand Gel

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet Version No: 8 Chemwatch 4814-78

Issue Date: 24-Feb-2010 CD 2011/1

NC317TCP

- 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.

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
<u>water</u>	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 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 charcoal may be given but are probably not effective in single ingestions.
- Fructose administration is contra-indicated due to side effects.

CG3 Page 3 of 11

Johnson & Johnson Microshield Antimicrobial Hand Gel

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet Version No: 8 Chemwatch 4814-78

Issue Date: 24-Feb-2010 CD 2011/1

NC317TCP

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

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

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.

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 (CO2), nitrogen oxides (NOx), other pyrolysis products typical of burning organic material.

FIRE INCOMPATIBILITY

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

HAZCHEM

•2Y

Personal Protective Equipment

Gloves, boots (chemical resistant).

Breathing apparatus.

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- \blacksquare 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.

CG3 Page 4 of 11

Johnson & Johnson Microshield Antimicrobial Hand Gel

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet

Version No: 8

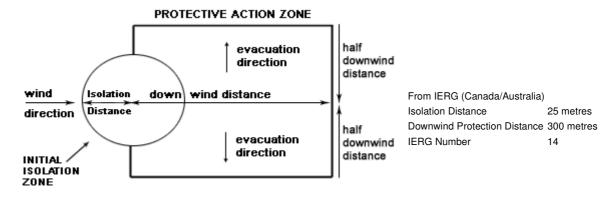
Chemwatch 4814-78

Issue Date: 24-Feb-2010 CD 2011/1

NC317TCP

- 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.

PROTECTIVE ACTIONS FOR SPILL



From US Emergency Response Guide 2000 Guide 127

FOOTNOTES

1 PROTECTIVE ACTION ZONE is defined as the area in which people are at risk of harmful exposure. This zone assumes that random changes in wind direction confines the vapour plume to an area within 30 degrees on either side of the predominant wind direction, resulting in a crosswind protective action distance equal to the downwind protective action distance.

2 PROTECTIVE ACTIONS should be initiated to the extent possible, beginning with those closest to the spill and working away from the site in the downwind direction. Within the protective action zone a level of vapour concentration may exist resulting in nearly all unprotected persons becoming incapacitated and unable

SINITIAL ISOLATION ZONE is determined as an area, including upwind of the incident, within which a high probability of localised wind reversal may expose nearly all persons without appropriate protection to life-threatening concentrations of the material.

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5 Guide 127 is taken from the US DOT emergency response guide book 6 IERG information is derived from CANUTEC - Transport Canada.

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 reaction with oxidising agents

STORAGE REQUIREMENTS

Store in original containers in approved flammable liquid storage area.

CG3 Page 5 of 11

Johnson & Johnson Microshield Antimicrobial Hand Gel

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet Version No: 8 Chemwatch 4814-78

Issue Date: 24-Feb-2010 CD 2011/1

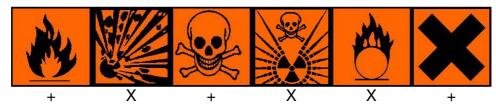
NC317TCP

- 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.

SAFE STORAGE WITH OTHER CLASSIFIED CHEMICALS



X: Must not be stored together

O: May be stored together with specific preventions

+: May be stored together

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

TWA TWA STEL STEL Peak **TWA** Peak Source Material Notes mg/m³ mg/m³ mg/m³ F/CC ppm ppm ppm

alcohol, denatured Australia Exposure 1000 1880 Standards (Ethyl alcohol)

The following materials had no OFI s on our records

· water: CAS:7732-18-5

EMERGENCY EXPOSURE LIMITS

Material Revised IDLH Value (mg/m3) Revised IDLH Value (ppm)

3,300 [LEL] alcohol, denatured 264

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 MICROSHIELD ANTIMICROBIAL HAND GEL:

Not available

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, 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:

CG3 Page 6 of 11

Johnson & Johnson Microshield Antimicrobial Hand Gel

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet Chemwatch 4814-78 Version No: 8

Issue Date: 24-Feb-2010 CD 2011/1

NC317TCP

- 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.

■ No exposure limits set by NOHSC or ACGIH.

PERSONAL PROTECTION









- 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.

- None under normal operating conditions.
- OTHERWISE:.
- Overalls.
- Eyewash unit

GLOVE SELECTION INDEX

■ Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the computer-generated selection: alcohol, denatured, water

■ Protective Material CPI *.

BUTYL NEOPRENE Α NATURAL RUBBER 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

* 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.

CG3 Page 7 of 11

Johnson & Johnson Microshield Antimicrobial Hand Gel

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet Version No: 8 Chemwatch 4814-78

Issue Date: 24-Feb-2010 CD 2011/1

NC317TCP

■ 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.

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.

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.

Type of Contaminant: Air Speed:

solvent, vapours, degreasing etc., evaporating from tank (in still

0.25-0.5 m/s (50-100 f/min.)

air).
aerosols, fumes from pouring operations, intermittent container

filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active

0.5-1 m/s (100-200 f/min.)

1-2.5 m/s (200-500 f/min.)

direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active

generation into zone of rapid air motion)

Within each range the appropriate value depends on:

Lower end of the range

1: Room air currents minimal or favourable to capture

- 2: Contaminants of low toxicity or of nuisance value only.
- 3: Intermittent, low production.
- 4: Large hood or large air mass in motion

Upper end of the range

- 1: Disturbing room air currents
- 2: Contaminants of high toxicity
- 3: High production, heavy use
- 4: Small hood-local control only

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.

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.

State	Gel	Molecular Weight	Not Applicable
Melting Range (℃)	Not Applicable	Viscosity	Not Available
Boiling Range (°C)	Not Available	Solubility in water (g/L)	Miscible
Flash Point (℃)	25	pH (1% solution)	Not Available
Decomposition Temp (°C)	Not Available	pH (as supplied)	6.5- 7.0

CG3 Page 8 of 11

Johnson & Johnson Microshield Antimicrobial Hand Gel

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet Version No: 8 Chemwatch 4814-78

Issue Date: 24-Feb-2010 CD 2011/1

NC317TCP

Autoignition Vapour Not Not Temp Pressure Available Available (°C) (kPa) 0.89 Upper Specific Explosive 19 Gravity 0.91 Limit (water=1) @ (%) 25C Lower Relative Explosive Vapour Not 3.3 Available Limit Density (%) (air=1) Volatile Not Evaporation Not Component Available Rate Available (%vol)

Section 10 - CHEMICAL STABILITY

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.

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 Effects

<1.5 g/L Mild: impaired vision, co-ordination and reaction time; emotional instability.

instab

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.

3-5 g/L

Depression of breathing may occur, respiratory failure may follow serious poisoning, choking on vomit may result in lung

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.

FYF

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

CG3 Page 9 of 11

Johnson & Johnson Microshield Antimicrobial Hand Gel

Hazard Alert Code: MODERATE

Group 1

Chemwatch Material Safety Data Sheet Version No: 8 Chemwatch 4814-78

Issue Date: 24-Feb-2010 CD 2011/1

NC317TCP

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", 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

JOHNSON & JOHNSON MICROSHIELD ANTIMICROBIAL HAND GEL:

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

beverages

Section 12 - ECOLOGICAL INFORMATION

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 5X10-6 atm-m3/mole. The potential for volatilisation of ethanol from dry soil surfaces may exist based upon an extrapolated vapor pressure of 59.3 mmHg. 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 5X10-6 atm-m3/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 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. Vapour-phase ethanol is degraded in the atmosphere by reaction with photochemicallyproduced hydroxyl radicals; the half-life for this reaction in air is estimated to be 5 days, calculated from its rate constant of 3.3X10-12 m3/molecule-sec at 25 deg C.

Ecotoxicity:

log Kow: -0.31- -0.32 Half-life (hr) air: 144

Half-life (hr) H2O surface water: 144 Henry's atm m3 /mol: 6.29E-06 BOD 5 if unstated: 0.93-1.67,63%

COD: 1.99-2.11,97% ThOD: 2.1. DO NOT discharge into sewer or waterways.

WATER:

Ecotoxicity

Persistence: Persistence: Ingredient Bioaccumulation Mobility Water/Soil Air

Johnson

No Johnson No Microshield Data Data Antimicrobial

CG3 Page 10 of 11

Johnson & Johnson Microshield Antimicrobial Hand Gel

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet Version No: 8 Chemwatch 4814-78

Issue Date: 24-Feb-2010 CD 2011/1

NC317TCP

Hand Available Available Gel

alcohol. I OW **MFD** LOW HIGH denatured

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:

Land Transport UNDG:

Class or division: 3 Subsidiary risk: None 1170 Ш UN packing group:

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

ALCOHOL SOLUTION)

Air Transport IATA:

UN/ID Number: Ш 1170 Packing Group:

Special provisions: АЗ

Shipping Name: ETHANOL **Maritime Transport IMDG:**

IMDG Class: IMDG Subrisk: None UN Number: 1170 Packing Group: EMS Number: F-E.S-D Special provisions: 144 223

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;

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", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "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", "International Fragrance Association (IFRA) Survey: Transparency
List", "OECD Representative List of High Production Volume (HPV) Chemicals", "World Anti-Doping Agency - Prohibited List World Anti-Doping Code - Substances Prohibited in Particular Sports", "World Anti-Doping Agency - The 2009 Prohibited List World AntiDoping Code - Substances Prohibited in Particular Sports", "World Anti-Doping Agency - The 2009 Prohibited List World Anti-Doping Code - Substances Prohibited in Particular Sports (Korean)"

CG3 Page 11 of 11

Johnson & Johnson Microshield Antimicrobial Hand Gel

Hazard Alert Code: MODERATE

Chemwatch Material Safety Data Sheet

Version No: 8

Chemwatch 4814-78

Issue Date: 24-Feb-2010

CD 2011/1

NC317TCP

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

"Australia Inventory of Chemical Substances (AICS)", "IMO IBC Code Chapter 18: List of products to which the Code does not apply", "International Fragrance Association (IFRA) Survey: Transparency List", "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.
- 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.

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Issue Date: 24-Feb-2010 Print Date: 24-Jun-2011