

# DOUBLE CLASS SCENT ANTIMICROBIAL HAND SOAP

ChemWatch Material Safety Data Sheet  
Issue Date: Tue 19-Aug-2003

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## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### PRODUCT NAME

DOUBLE CLASS SCENT ANTIMICROBIAL HAND SOAP

### STATEMENT OF HAZARDOUS NATURE

**CONSIDERED A DANGEROUS SUBSTANCE ACCORDING TO DIRECTIVE 67/548/EEC, POINT 4; AND HAZARDOUS ACCORDING TO OSHA 29 CFR 1910.1200 (USA).**

### SUPPLIER

Company:  
Double Class (M) Sdn Bhd  
Address:  
No.14, Jalan 4  
Pandan Inidah  
Kuala Lumpur, 55300  
MYS  
Telephone: +60 3 4280 9898

### PRODUCT USE

Antimicrobial hand soap.

### SYNONYMS

Double Class

## Section 2 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	INT HAZ	%
sodium lauryl ether sulfate R CODES: R22,R38	9004-82-4	Xn	0-15
coconut diethanolamide EC NO: 271-657-0 R CODES: R22,R38,R41,R48/22	68603-42-9	Xn	0-9
sodium chloride EC NO: 231-598-3	7647-14-5	None	0-9
pearling agent			0-5
preservative			0-5
perfume and colouring			0-5
chlorhexidine gluconate EC NO: 242-354-0 R CODES: R22	18472-51-0	Xn	0-1
water EC NO: 231-791-2	7732-18-5	None	60-90

## Section 3 - HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

#### RISK

Irritating to eyes.  
Cumulative effects may result following exposure\*.  
Possible respiratory and skin sensitiser\*.

continued...

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## Section 3 - HAZARDS IDENTIFICATION ...

Exposure may produce irreversible effects\*.  
\* (limited evidence).

### POTENTIAL HEALTH EFFECTS

#### ACUTE HEALTH EFFECTS

##### SWALLOWED

Although ingestion is not thought to produce harmful effects (as classified under EC Directives), the material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.

##### EYE

Evidence exists, or practical experience predicts, that the material may cause eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals.

##### SKIN

The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.

##### INHALED

The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

#### CHRONIC HEALTH EFFECTS

Cumulative effects may result following exposure\*.

On the basis, primarily, of animal experiments, concern has been expressed by at least one classification body that the material may produce carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment. Limited evidence shows that inhalation of the material is capable of inducing a sensitisation reaction in a significant number of individuals at a greater frequency than would be expected from the response of a normal population. Pulmonary sensitisation, resulting in hyperactive airway dysfunction and pulmonary allergy may be accompanied by fatigue, malaise and aching. Significant symptoms of exposure may persist for extended periods, even after exposure ceases. Symptoms can be activated by a variety of nonspecific environmental stimuli such as automobile exhaust, perfumes and passive smoking. There exists limited evidence that shows that skin contact with the material is capable either of inducing a sensitisation reaction in a significant number of individuals, and/or of producing positive response in experimental animals.

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

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## Section 3 - HAZARDS IDENTIFICATION ...

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cause a sensitisation reaction in some persons compared to the general population.

Exposure to Sulfonates can cause an imbalance in cellular salts and therefore cellular function. Airborne sulfonates may be responsible for respiratory allergies and, in some instances, minor dermal allergies.

Principal hazards are accidental eye contact and cleaner overuse. Overuse or obsessive cleaner use may lead to defatting of the skin and may cause irritation, drying, cracking, leading to dermatitis.

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## Section 4 - FIRST AID MEASURES

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### SWALLOWED

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

### 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.
- If pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

### SKIN

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.
- Other measures are usually unnecessary.

### NOTES TO PHYSICIAN

Treat symptomatically.

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## Section 5 - FIRE FIGHTING MEASURES

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### EXTINGUISHING MEDIA

There is no restriction on the type of extinguisher which may be used.  
Use extinguishing media suitable for surrounding area

### FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves for fire only.
- Prevent, by any means available, spillage from entering drains or water courses.

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## Section 5 - FIRE FIGHTING MEASURES ...

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- Use fire fighting procedures suitable for surrounding 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

The emulsion is not combustible under normal conditions. However, it will break down under fire conditions and the hydrocarbon component will burn.

- Non combustible.
- Not considered to be a significant fire risk.
- Expansion or decomposition on heating may lead to violent rupture of containers.
- Decomposes on heating and may produce toxic/ irritating fumes.
- May emit acrid smoke.

Decomposition may produce toxic fumes of sulfur oxides (SO<sub>x</sub>)

May emit poisonous fumes.

May emit corrosive fumes.

### FIRE INCOMPATIBILITY

None known.

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## Section 6 - ACCIDENTAL RELEASE MEASURES

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### MINOR SPILLS

- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.
- Wipe up.
- Place in a suitable labelled container for waste disposal.

### MAJOR SPILLS

Moderate hazard.

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- Stop leak if safe to do so.
- Contain spill with sand, earth or vermiculite.
- Collect recoverable product into labelled containers for recycling.
- Neutralise/decontaminate residue.
- Collect solid residues and seal in labelled drums for disposal.
- Wash area and prevent runoff into drains.
- After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.
- If contamination of drains or waterways occurs, advise emergency services.

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## Section 7 - HANDLING AND STORAGE

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### PROCEDURE FOR HANDLING

- Avoid all personal contact, including inhalation.
  - Wear protective clothing when risk of exposure occurs.
  - Use in a well-ventilated area.
  - Avoid contact with moisture.
  - Avoid contact with incompatible materials.
  - When handling, DO NOT eat, drink or smoke.
  - Keep containers securely sealed when not in use.
  - Avoid physical damage to containers.
  - Always wash hands with soap and water after handling.
  - Work clothes should be laundered separately. Launder contaminated clothing before re-use.
  - Use good occupational work practice.
  - Observe manufacturer's storing and handling recommendations.
  - Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
- DO NOT allow clothing wet with material to stay in contact with skin

### SUITABLE CONTAINER

- Polyethylene or polypropylene container.
- Packing as recommended by manufacturer
- Check all containers are clearly labelled and free from leaks.

### STORAGE INCOMPATIBILITY

None known

### STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storing and handling recommendations.

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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### EXPOSURE CONTROLS

No data for Double Class Scent Antimicrobial Hand Soap.

### EXPOSURE STANDARDS FOR MIXTURE

"Worst Case" computer-aided prediction of vapour components/concentrations:

Composite Exposure Standard for Mixture (TWA) (mg/m<sup>3</sup>): 0.1 mg/m<sup>3</sup>

If the breathing zone concentration of ANY of the components listed below is exceeded, "Worst Case" considerations deem the individual to be overexposed.

Component	Breathing Zone ppm	Breathing Zone mg/m <sup>3</sup>	Mixture Conc: (%)
chlorhexidine gluconate	0	0.1	1

Operations which produce a spray/mist or fume/dust, introduce particulates to the breathing zone.

If the breathing zone concentration of ANY of the components listed below is

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION ...

exceeded, "Worst Case" considerations deem the individual to be overexposed.

At the "Composite Exposure Standard for Mixture" (TWA) (mg/m<sup>3</sup>): 1 mg/m<sup>3</sup>

Component	Breathing Zone ppm	Breathing Zone mg/m <sup>3</sup>	Mixture Conc (%)
sodium chloride	0.9	9	0

### INGREDIENT DATA

For each of the following

SODIUM LAURYL ETHER SULFATE:

WATER:

No exposure limits set by NOHSC or ACGIH

COCONUT DIETHANOLAMIDE:

No exposure limits set by NOHSC or ACGIH

SODIUM CHLORIDE:

TLV TWA: 10 mg/m<sup>3</sup> (Value for particulate matter containing no asbestos and <1% crystalline silica, Inhalable fraction) [ACGIH]

TLV TWA: 3 mg/m<sup>3</sup> (Value for particulate matter containing no asbestos and <1% crystalline silica, Respirable fraction) [ACGIH]

No exposure limits set by NOHSC or ACGIH

Dusts not otherwise classified, as inspirable dust;

ES TWA: 10 mg/m<sup>3</sup>

CHLORHEXIDINE GLUCONATE:

CEL TWA: 0.0027 ppm; 0.1 mg/m<sup>3</sup>\*

\*[AstraZeneca]

### PERSONAL PROTECTION

#### EYE

Safety glasses with side shields.

Chemical goggles.

Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them. DO NOT wear contact lenses.

#### HANDS/FEET

Wear chemical protective gloves, eg. PVC.

Wear safety footwear or safety gumboots, eg. Rubber

NOTE: The material may produce skin sensitisation in predisposed individuals.

Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.

#### OTHER

Overalls.

P.V.C. apron.

Barrier cream.

Skin cleansing cream.

Eye wash 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:

Substance

continued...

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION ...

water  
sodium chloride  
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 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.

### RESPIRATOR

Respiratory protection is required when ANY "Worst Case" vapour-phase concentration is exceeded (see Computer Prediction in "Exposure Standards").

Protection Factor (Min)	Half-Face Respirator	Full-Face Respirator
10 x ES	AK-AUS AK-PAPR-AUS	- -
50 x ES	- -	AK-AUS AK-PAPR-AUS
100 x ES	- -	AK-2 AK-PAPR-2

^ - Full-face

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

General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in specific circumstances. If risk of overexposure exists, wear 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.

Type of Contaminant: solvent, vapours, degreasing etc., evaporating from tank (in still air).	Air Speed: 0.25-0.5 m/s (50-100 f/min)
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 generation)	0.5-1 m/s (100-200 f/min.)
direct spray, spray painting in shallow booths, drum filling, conveyer loading,	1-2.5 m/s (200-500 f/min.)

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION ...

crusher dusts, gas discharge (active generation into zone of rapid air motion)

grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).

2.5-10 m/s (500-2000 f/min.)

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

### PHYSICAL PROPERTIES

Liquid.  
Mixes with water.

Molecular Weight: Not Applicable  
Melting Range (°C): Not Available  
Solubility in water (g/L): Miscible  
pH (1% solution): Not Available  
Volatile Component (%vol): Not Available  
Relative Vapour Density (air=1): Not Available  
Lower Explosive Limit (%): Not Applicable  
Autoignition Temp (°C): Not Applicable  
State: Liquid

Boiling Range (°C): Not Available  
Specific Gravity (water=1): Not Available  
pH (as supplied): Not Available  
Vapour Pressure (kPa): Not Available  
Evaporation Rate: Not Available  
Flash Point (°C): Not Applicable  
Upper Explosive Limit (%): Not Applicable  
Decomposition Temp (°C): Not Available

### APPEARANCE

White pearlish liquid with a mint or baby powder fragrance; mixes with water.

## Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

continued...

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## Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION ...

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### CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

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## Section 11 - TOXICOLOGICAL INFORMATION

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### Double Class Scent Antimicrobial Hand Soap

~TOXICITY FIGURE  
~IRRITATION  
~GENOTOX  
~OTHER

#### SODIUM LAURYL ETHER SULFATE:

##### TOXICITY

Oral (rat) LD50: 1600 mg/kg

##### IRRITATION

Skin (rabbit): 25 mg/24 hr moderate

#### COCONUT DIETHANOLAMIDE:

##### TOXICITY

N,N-bis(2-hydroxyethyl) dodecanamide:

Oral (rat) LD50: 2700 mg/kg

##### IRRITATION

Nil reported.

#### SODIUM CHLORIDE:

##### TOXICITY

Oral (rat) LD50: 3000 mg/kg

Oral (human) TDLo: 12357 mg/kg/23d

Oral Lowest Toxic Dose (Human): 8.2 mg/kg

##### IRRITATION

Skin (rabbit): 500 mg/24h - mild

Eye (rabbit): 10 mg - moderate

Eye (rabbit): 100 mg/24h - moderate

#### CHLORHEXIDINE GLUCONATE:

##### TOXICITY

Oral (rat) LD50: 2000 mg/kg

Subcutaneous (rat) LD50: 3320 mg/kg

Intravenous (rat) LD50: 24.2 mg/kg

##### IRRITATION

Nil reported

#### WATER:

No significant acute toxicological data identified in literature search.

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## Section 12 - ECOLOGICAL INFORMATION

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Octanol/water partition coefficients cannot easily be determined for surfactants because one part of the molecule is hydrophilic and the other part is hydrophobic. Consequently they tend to accumulate at the interface and are not extracted into one or other of the liquid phases. As a result surfactants are expected to transfer slowly, for example, from water into the flesh of fish. During this process, readily biodegradable surfactants are expected to be metabolised rapidly during the process of bioaccumulation. This was emphasised by the OECD Expert Group stating that chemicals are not to be considered to show bioaccumulation potential if they are readily biodegradable.

Several anionic and nonionic surfactants have been investigated to evaluate their potential to bioconcentrate in fish. BCF values (BCF - bioconcentration factor) ranging from 1 to 350 were found. These are absolute maximum values, resulting from the radiolabelling technique used. In all these studies,

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## Section 12 - ECOLOGICAL INFORMATION ...

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substantial oxidative metabolism was found resulting in the highest radioactivity in the gall bladder. This indicates liver transformation of the parent compound and biliary excretion of the metabolised compounds, so that "real" bioconcentration is overstated. After correction it can be expected that "real" parent BCF values are one order of magnitude less than those indicated above, i.e. "real" BCF is <100. Therefore the usual data used for classification by EU directives to determine whether a substance is "Dangerous to the Environment" has little bearing on whether the use of the surfactant is environmentally acceptable.  
DO NOT discharge into sewer or waterways.

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## Section 13 - DISPOSAL CONSIDERATIONS

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- Recycle wherever possible.
  - Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
  - Dispose of by: Burial in a licenced land-fill or Incineration in a licenced apparatus (after admixture with suitable combustible material)
  - Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.
- Puncture containers to prevent re-use and bury at an authorised landfill.

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## Section 14 - TRANSPORTATION INFORMATION

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Shipping Name:  
None  
None  
Hazard Class: None  
UN/NA Number: None  
ADR Number:  
Packing Group: None  
Labels Required:  
Additional Shipping Information:  
International Transport Regulations:  
IMO: None

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## Section 15 - REGULATORY INFORMATION

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### SAFETY

Do not breathe dust.  
Avoid contact with skin.  
Wear eye/ face protection.  
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.  
If swallowed, IMMEDIATELY contact Doctor or Poisons Information Centre (show this container or label).

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## Section 16 - OTHER INFORMATION

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### RISK

R36 Irritating to eyes.

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