

# Safety Data Sheet

Product Name **FORWARD**

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Supplier Name** JOHNSONDIVERSEY NEW ZEALAND LTD  
**Address** 3 Diversey Lane, Wiri, Manukau, NEW ZEALAND, 2025  
**Telephone** +64 9 278 2119  
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**Emergency** +0800 243 622  
**Web Site** <http://www.johnsondiversey.com/>  
**Synonym(s)** ALL PACK SIZES  
**Use(s)** ALKALINE CLEANING AGENT • CLEANING AGENT • FLOOR CLEANER  
**SDS Date** 16 Oct 2008

## 2. HAZARDS IDENTIFICATION

**CLASSIFIED AS HAZARDOUS ACCORDING TO HAZARDOUS SUBSTANCES [CLASSIFICATION] REGULATIONS 2001**

### HSNO CLASSIFICATION

6.3A Substances that are irritating to the skin.  
 6.4A Substances that are irritating to the eye.

### HAZARD STATEMENT

H315 Causes skin irritation.  
 H319 Causes serious eye irritation.

### PREVENTION STATEMENT

P103 Read label before use (applies only where the substance is available to the general public).  
 P264 Wash thoroughly after handling.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

### RESPONSE STATEMENT

P321 Specific treatment is advised - see first aid instructions.  
 P362 Take off contaminated clothing and wash before re-use.  
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
 P337 + P313 If eye irritation persists: Get medical advice/attention.

### DISPOSAL STATEMENT

P501 In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided.

**NOT CLASSIFIED AS A DANGEROUS GOOD ACCORDING TO LAND TRANSPORT RULE: DANGEROUS GOODS 2005; NZS 5433:2007, UN, IMDG OR IATA**

<b>UN No.</b>	None Allocated	<b>DG Class</b>	None Allocated	<b>Subsidiary Risk(s)</b>	None Allocated
<b>Packing Group</b>	None Allocated	<b>Hazchem Code</b>	None Allocated	<b>EPG</b>	None Allocated

### 3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	CAS No.	Content
ETHOXYLATED FATTY ALCOHOL SURFACTANT	68131-39-5	<5%
SODIUM METASILICATE ANHYDROUS	6834-92-0	<5%
BENZALKONIUM CHLORIDE	8001-54-5	<5%
SODIUM TRIPOLYPHOSPHATE	7758-29-4	<5%
EDTA TETRASODIUM SALT	64-02-8	<1%
NON HAZARDOUS INGREDIENTS	Not Available	remainder

### 4. FIRST AID MEASURES

<b>Eye</b>	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.
<b>Inhalation</b>	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
<b>Skin</b>	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre or a doctor.
<b>Ingestion</b>	For advice, contact a Poisons Information Centre on 0800 764 766 (0800 POISON) or +643 479 7248 (New Zealand) or a doctor (at once). If swallowed, do not induce vomiting.
<b>Advice to Doctor</b>	Treat symptomatically
<b>First Aid Facilities</b>	Eye wash facilities should be available.

### 5. FIRE FIGHTING MEASURES

<b>Flammability</b>	Non flammable. May evolve toxic gases (carbon/ nitrogen oxides, ammonia, chlorides, hydrocarbons) when heated to decomposition.
<b>Fire and Explosion</b>	Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.
<b>Extinguishing</b>	Prevent contamination of drains or waterways.
<b>Hazchem Code</b>	None Allocated

### 6. ACCIDENTAL RELEASE MEASURES

<b>Spillage</b>	If spilt (bulk), use personal protective equipment. Contain spillage, then cover / absorb spill with non-combustible absorbant material (vermiculite, sand, or similar), collect and place in suitable containers for disposal. Clean spill site with water. For small spills, dilute with water and flush to sewer. CAUTION: Spill site may be slippery.
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### 7. STORAGE AND HANDLING

<b>Storage</b>	Store in cool, dry, well ventilated area, removed from strong oxidising agents (eg. hypochlorites, peroxides, nitrates), anionic detergents (eg. soaps), heat sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills.
<b>Handling</b>	Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

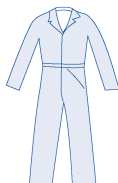
### 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

<b>Exposure Stds</b>	No exposure standard(s) allocated.
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**Engineering Controls**      Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

**PPE**      Wear splash-proof goggles, PVC or rubber gloves and coveralls. Where an inhalation risk exists, wear: a Type A (Organic vapour) respirator. If spraying, wear: a Type A-Class P1 (Organic gases/vapours and Particulate) respirator.



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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance</b>	CLEAR GREEN LIQUID	<b>Solubility (Water)</b>	SOLUBLE
<b>Odour</b>	FRESH HERBAL ODOUR	<b>Specific Gravity</b>	1.073 (Approximately)
<b>pH</b>	12.5 - 13.5	<b>% Volatiles</b>	> 60 % (Water)
<b>Vapour Pressure</b>	18 mm Hg @ 20°C	<b>Flammability</b>	NON FLAMMABLE
<b>Vapour Density</b>	NOT AVAILABLE	<b>Flash Point</b>	NOT AVAILABLE
<b>Boiling Point</b>	100°C (Approximately)	<b>Upper Explosion Limit</b>	NOT RELEVANT
<b>Melting Point</b>	< 0°C	<b>Lower Explosion Limit</b>	NOT RELEVANT
<b>Evaporation Rate</b>	AS FOR WATER		

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## 10. STABILITY AND REACTIVITY

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<b>Chemical Stability</b>	Stable under recommended conditions of storage.
<b>Conditions to Avoid</b>	Avoid heat, sparks, open flames and other ignition sources.
<b>Material to Avoid</b>	Incompatible with oxidising agents (eg. hypochlorites), anionic detergents (eg. soaps), heat and ignition sources.
<b>Hazardous Decomposition Products</b>	May evolve toxic gases (carbon/ nitrogen oxides, ammonia, chlorides, hydrocarbons) when heated to decomposition.
<b>Polymerization</b>	Polymerization is not expected to occur.

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## 11. TOXICOLOGICAL INFORMATION

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<b>Health Hazard Summary</b>	Corrosive. Use safe work practices to avoid eye or skin contact. Due to the low vapour pressure of this product an inhalation hazard is not anticipated under normal conditions. If diluted, the potential for corrosive effects will be reduced. Potential skin and respiratory sensitising agent. Those individuals with pre-existing skin or respiratory allergies may be more susceptible to adverse effects.
<b>Eye</b>	Corrosive - severe irritant. Contact may result in pain, redness, corneal burns and ulceration with possible permanent damage.
<b>Inhalation</b>	Corrosive. Over exposure to vapours may result in respiratory irritation, nausea, dizziness and headache. Occupational exposure to quaternary ammonium compounds has been reported to cause asthma, although rare. May cause sensitisation by inhalation.
<b>Skin</b>	Corrosive. Contact may result in irritation, redness, itching, pain, rash, dermatitis and burns. Potential sensitising agent.
<b>Ingestion</b>	Corrosive. Ingestion may result in ulceration and burns to the mouth and throat, nausea, vomiting, abdominal pain and diarrhoea.
<b>Toxicity Data</b>	SODIUM METASILICATE ANHYDROUS (6834-92-0) LD50 (Ingestion): 770 mg/kg (mouse) LDLo (Ingestion): 250 mg/kg (dog) LDLo (Intraperitoneal): 200 mg/kg (guinea pig) TDLo (Ingestion): 15 g/kg (rat) BENZALKONIUM CHLORIDE (8001-54-5) LD50 (Ingestion): 240 mg/kg (rat) LD50 (Intraperitoneal): 14.5 mg/kg (rat) LD50 (Intravenous): 13.9 mg/kg (rat) LD50 (Subcutaneous): 64 mg/kg (mouse) TDLo (Ingestion): 266 mg/kg (woman; oesophogas changes, diarrhoea) SODIUM TRIPOLYPHOSPHATE (7758-29-4)

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LD50 (Ingestion): 3100 mg/kg (mouse)  
LD50 (Intraperitoneal): 525 mg/kg (rat)  
LD50 (Intravenous): 71 mg/kg (mouse)  
LD50 (Subcutaneous): 750mg/kg (guinea pig)  
EDTA TETRASODIUM SALT (64-02-8)  
LD50 (Intraperitoneal): 330mg/kg (mouse)

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**12. ECOLOGICAL INFORMATION**

**Environment**      Benzalkonium chloride derivatives/quaternary ammonium compounds are commonly used as disinfectants, indicating toxicity to microorganisms. Benzalkonium chloride is toxic to trout above 2 ppm.

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**13. DISPOSAL CONSIDERATIONS**

**Waste Disposal**      For small amounts, absorb with sand, vermiculite or similar and dispose of to an approved landfill site. For larger amounts, contact the manufacturer for additional information. Prevent contamination of drains or waterways as aquatic life may be threatened and environmental damage may result.

**Legislation**      Dispose of in accordance with relevant local legislation.

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**14. TRANSPORT INFORMATION**

**NOT CLASSIFIED AS A DANGEROUS GOOD ACCORDING TO LAND TRANSPORT RULE: DANGEROUS GOODS 2005; NZS 5433:2007, UN, IMDG OR IATA**

<b>Shipping Name</b>	None Allocated				
<b>UN No.</b>	None Allocated	<b>DG Class</b>	None Allocated	<b>Subsidiary Risk(s)</b>	None Allocated
<b>Packing Group</b>	None Allocated	<b>Hazchem Code</b>	None Allocated	<b>EPG</b>	None Allocated

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**15. REGULATORY INFORMATION**

**Approval Code**      HSR002530

**Group Name**      Cleaning Products (Subsidiary Hazard) Group Standard 2006

**HSNO Controls**      Refer to the ERMA website for more information: [www.ermanz.govt.nz](http://www.ermanz.govt.nz)

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**16. OTHER INFORMATION**

**Additional Information**      BENZALKONIUM CHLORIDE: Benzalkonium chloride can be a severe eye & skin irritant & corrosive. Contact with concentrated solutions can cause deep injury and ulceration (Wahlberg, 1985). A 0.1% concentration will cause mild discomfort to the eye. Ingestion may cause a burning pain in the mouth, throat and abdomen, salivation, low blood pressure, CNS depression, excitement, confusion and weakness, laboured breathing & cyanosis (blue skin due to lack of oxygen in blood) or circulatory shock. When used in low concentrations there is little local or systemic toxicity.

**RESPIRATORS:** In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

**ABBREVIATIONS:**

ADB - Air-Dry Basis.

BEI - Biological Exposure Indice(s)

CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.

CNS - Central Nervous System.

EINECS - European Inventory of Existing Commercial chemical Substances.

IARC - International Agency for Research on Cancer.

M - moles per litre, a unit of concentration.

mg/m3 - Milligrams per cubic metre.

NOS - Not Otherwise Specified.

NTP - National Toxicology Program.

OSHA - Occupational Safety and Health Administration.

pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).

ppm - Parts Per Million.

RTECS - Registry of Toxic Effects of Chemical Substances.

TWA/ES - Time Weighted Average or Exposure Standard.

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**HEALTH EFFECTS FROM EXPOSURE:**

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Chem Alert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

**PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:**

The recommendation for protective equipment contained within this Chem Alert report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

**Report Status**

This document has been compiled by RMT on behalf of the manufacturer of the product and serves as the manufacturer's Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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**End of Report**