

MATERIAL SAFETY DATA SHEET



FORWARD DC (US)

HMIS		NFPA	Personal protective equipment
Health	3	3	
Fire Hazard	0	0	
Reactivity	0	0	

Version Number: 4

Preparation date: 2009-09-14

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: FORWARD DC (US)

MSDS #: 114540028

Product Code: 04545

Recommended use: Disinfectant. Cleaning product. This product is intended to be diluted prior to use.

Manufacturer, importer, supplier:
 US Headquarters
 JohnsonDiversey, Inc.
 8310 16th St.
 Sturtevant, Wisconsin 53177-1964
 Phone: 1-800-233-1000

Emergency telephone number: 1-800-851-7145 (U.S.); 1-651-917-6133 (Int'l)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER. CORROSIVE. CAUSES SKIN AND EYE BURNS. HARMFUL OR FATAL IF SWALLOWED.

Principle routes of exposure: Eye contact. Skin contact. Inhalation. Ingestion.

Eye contact: Corrosive. Causes permanent eye damage, including blindness.

Skin contact: Corrosive. Causes permanent damage.

Inhalation: May cause irritation and corrosive effects to nose, throat and respiratory tract.

Ingestion: Corrosive. Causes burns to mouth, throat and stomach.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients

Ingredient(s)	CAS #	Weight %	LD50 Oral - Rat (mg/kg)	LD50 Dermal - Rabbit	LC50 Inhalation - Rat
Ethyl alcohol	64-17-5	0.1 - 1.5%	7060	Not available	Not available

4. FIRST AID MEASURES

Eye contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Get medical attention immediately.

Skin contact: Take off contaminated clothing. Immediately flush with plenty of water for 15-20 minutes. Get medical attention immediately.

Inhalation: If breathing is affected, remove to fresh air. Get medical attention immediately.

Ingestion: Call medical attendant, doctor, or poison control center immediately. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Never give anything by mouth to an unconscious person. THEN IMMEDIATELY CONTACT A PHYSICIAN OR POISON CENTER.

Notes to physician: Probable mucosal damage may contraindicate the use of gastric lavage.

Aggravated Medical Conditions: Persons with pre-existing skin disorders may be more susceptible to irritating effects

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: The product is not flammable. Extinguish fire using agent suitable for surrounding fire.

Specific hazards: None known.

Unusual hazards: Corrosive material (See sections 8 and 10).

Specific methods: None known.

Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Extinguishing media which must not be used for safety reasons: No information available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Put on appropriate personal protective equipment (see Section 8.).
Environmental precautions and clean-up methods: Clean-up methods - large spillage. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Use appropriate containment to avoid environmental contamination.

7. HANDLING AND STORAGE

Handling:
 Avoid contact with skin, eyes and clothing. Do not taste or swallow. Avoid breathing vapors or mists. Use only with adequate ventilation. Remove and wash contaminated clothing and footwear before re-use. Wash thoroughly after handling. Product residue may remain on/in empty containers. All precautions for handling the product must be used in handling the empty container and residue. **FOR COMMERCIAL AND INDUSTRIAL USE ONLY.**
Storage:
 Protect from freezing. Keep tightly closed in a dry, cool and well-ventilated place. **KEEP OUT OF REACH OF CHILDREN.**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:
 Good general ventilation should be sufficient to control airborne levels. Respiratory protection is not required if good ventilation is maintained.

Personal Protective Equipment

Eye protection: Chemical-splash goggles.
Hand protection: Chemical-resistant gloves
Skin and body protection: Protective footwear. If major exposure is possible, wear suitable protective clothing and footwear.
Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Hygiene measures: Handle in accordance with good industrial hygiene and safety practice

Ingredient(s)	CAS #	ACGIH	OSHA	Mexico
Ethyl alcohol	64-17-5	1000 ppm (TWA)	1900 mg/m ³ (TWA) 1000 ppm (TWA)	1000 ppm (TWA) 1900 mg/m ³ (TWA)

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid	Bulk density: No information available
pH: 13.5	Dilution pH: No information available.
Appearance: Aqueous solution	Vapor density: No information available
Color: Clear Green	Evaporation Rate: No information available
Odor: Citrus Fruity	Boiling point/range: Not determined
Specific gravity: 1.077	Melting point/range: Not determined
Density: 8.96 lbs/gal	Decomposition temperature: Not determined
VOC: 0.3% *	Autoignition temperature: No information available
Flash point: >200°F >93.4°C	Partition coefficient (n-octanol/water): No information available
Solubility: Completely Soluble	Solubility in other solvents: No information available
Viscosity: No information available	Elemental Phosphorus: 0.81% by wt.

Explosion limits: - lower: Not determined- upper: Not determined

* - Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 8.5, Article 2, Consumer Products, Sections 94508

10. STABILITY AND REACTIVITY

Stability: The product is stable.
Polymerization: Hazardous polymerization does not occur.
Hazardous decomposition products: None reasonably foreseeable.
Conditions to avoid: Do not freeze.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Corrosive. Oral LD50 estimated to be greater than 5000 mg/kg. Dermal LD50 estimated to be > 2000 mg/kg
Component Information: See Section 3
Chronic toxicity: None known
Specific effects
Carcinogenic effects: None known
Mutagenic effects: None known
Reproductive toxicity: None known
Target organ effects: None known

Hazardous ingredients

Ingredient(s)	CAS #	NTP	IARC	OSHA
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11. TOXICOLOGICAL INFORMATION

Ethyl alcohol	64-17-5	X		X
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12. ECOLOGICAL INFORMATION

Environmental Information: No data available

13. DISPOSAL CONSIDERATIONS

Do not contaminate water, food, or feed by storage or disposal

Pesticide Storage:

Store in original container in areas inaccessible to children. Open dumping is prohibited. Do not reuse empty container

Pesticide Disposal:

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law

Container Disposal:

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incinerate, or, if allowed by State and local authorities burn. If burned, stay out of smoke

14. TRANSPORT INFORMATION

DOT/TDG: Please refer to the Bill of Lading/receiving documents for up to date shipping information

15. REGULATORY INFORMATION

International Inventories

All components of this product are listed on the following inventories: U.S.A. (TSCA).

U.S. Regulations

EPA Reg. No.: 70627-10

California Proposition 65: This product is not subject to the reporting requirements under California's Proposition 65

CERCLA/ SARA

SARA 311/312 Hazard Categories

Immediate:	X
Delayed:	-
Fire:	-
Reactivity:	-
Sudden Release of Pressure:	-

16. OTHER INFORMATION

Reason for revision: Not applicable
Prepared by: NAPRAC
Additional advice: None

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