

MATERIAL SAFETY DATA SHEET



Adage II

HMIS		NFPA	Personal protective equipment
Health	3	3	
Flammability	0	0	
Physical Hazard / Instability	0	0	

Version Number: 3

Preparation date: 2014-03-12

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Adage II

MSDS #: MS0300254
Product Code: 0070205, 57644280
Recommended use:

- Warewashing product
- Sanitizer
- This product is intended to be diluted prior to use

Manufacturer, importer, supplier:

US Headquarters Diversey, Inc. 8310 16th St. Sturtevant, Wisconsin 53177-1964 Phone: 1-888-352-2249 MSDS Internet Address: www.diversey.com	Canadian Headquarters Diversey, Inc. - Canada 2401 Bristol Circle Oakville, Ontario L6H 6P1 Phone: 1-800-668-3131
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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.

Principal routes of exposure: Eye contact. Skin contact. Inhalation.

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. Use only in well-ventilated areas. Avoid repeated or prolonged inhalation of vapors or spray mist which may cause cumulative effects. Persons with pre-existing respiratory conditions should be particularly careful about possible respiratory effects.

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS #	Weight %	LD50 Oral - Rat (mg/kg)	LD50 Dermal - Rabbit	LC50 Inhalation - Rat
Phosphoric acid	7664-38-2	20 - 30%	1530	=2730 mg/kg	>850 mg/m ³ (1 h)
Iodine	7553-56-2	1 - 5%	14000	Not available	Not available
Dipropylene glycol methyl ether	34590-94-8	1 - 5%	5230	=9500 mg/kg	Not available

4. FIRST AID MEASURES

Eye contact: Immediately flush eyes with running water for 15-20 minutes, keeping eyelids open. Get medical attention immediately.

Skin contact: 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.

Adage II

Ingestion: If swallowed, rinse mouth. Give a cupful of water or milk. THEN IMMEDIATELY CONTACT A PHYSICIAN OR POISON CENTER. DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Aggravated Medical Conditions: Individuals with chronic respiratory disorders such as asthma, chronic bronchitis, emphysema, etc., 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.

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

Specific hazards: Not applicable.

Unusual hazards: 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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment.

Environmental precautions and clean-up methods: Clean-up methods - large spillage. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. Use a water rinse for final clean-up.

7. HANDLING AND STORAGE

Handling: Avoid contact with skin, eyes and clothing. Do not taste or swallow. Avoid breathing vapors or mists. Use only in well-ventilated areas. 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. Mix only with water. DO NOT MIX WITH AMMONIA, BLEACH, OR OTHER CHLORINATED COMPOUNDS. Can react to release chlorine gas. 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
Phosphoric acid	7664-38-2	3 mg/m ³ (STEL) 1 mg/m ³ (TWA)	1 mg/m ³ (TWA)	3 mg/m ³ (STEL) 1 mg/m ³ (TWA)
Iodine	7553-56-2	0.1 ppm (STEL) 0.01 ppm (TWA)	0.1 ppm (Ceiling) 1 mg/m ³ (Ceiling)	0.1 ppm (Ceiling) 1 mg/m ³ (Ceiling)
Dipropylene glycol methyl ether	34590-94-8	150 ppm (STEL) 100 ppm (TWA)	Skin 100 ppm (TWA) 600 mg/m ³ (TWA)	150 ppm (STEL) 900 mg/m ³ (STEL) 100 ppm (TWA) 60 mg/m ³ (TWA)

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Appearance: Aqueous solution

Specific gravity: 1.15

Vapor density: No information available

Boiling point/range: Not determined

Decomposition temperature: Not determined

Solubility: Completely Soluble

Solubility in other solvents: No information available

Partition coefficient (n-octanol/water): No information available

Elemental Phosphorus: 5.95 % by wt.

pH: 1.0

Bulk density: No information available

Evaporation Rate: No information available

Color: Opaque, Dark, Brown

Odor: Iodine

Melting point/range: Not determined

Autoignition temperature: No information available

Density: 9.59 lbs/gal Kg/L

Flash point: > 200 °F > 93.4 °C

Viscosity: No information available

VOC: 1.5 % *

Dilution pH: 3.3 @ 1:128

Explosion limits: - upper: Not determined - lower: 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.
Materials to avoid: Ammonia. Bases. Do not mix with chlorinated products (such as bleach).
Conditions to avoid: Do not mix with any other product or chemical.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Corrosive. Oral LD50 estimated to be between 500 - 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

12. ECOLOGICAL INFORMATION

Environmental Information: No data available.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:
 This product, as sold, if discarded or disposed, is a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Dispose in compliance with all Federal, state, provincial, and local laws and regulations.
RCRA Hazard Class (undiluted product): D002 Corrosive Waste

14. TRANSPORT INFORMATION

DOT/TDG/IMDG: Please refer to the Diversey HazMat Library, only available through Internet Explorer, <http://naextranet.diverse.com/dot/>, for up to date shipping information.

DOT (Ground) Bill of Lading Description: UN1805, PHOSPHORIC ACID SOLUTION, 8, III

IMDG (Ocean) Bill of Lading Description: UN1805, PHOSPHORIC ACID SOLUTION, 8, III

15. REGULATORY INFORMATION

International Inventories at CAS# Level

All components of this product are listed on the following inventories: U.S.A. (TSCA), Canada (DSL/NDSL).

U.S. Regulations

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

RIGHT TO KNOW (RTK)

Ingredient(s)	CAS #	MARTK:	NJRTK:	PARTK:	RIRTK:
Water	7732-18-5	-	-	-	-
Phosphoric acid	7664-38-2	X	X	X	X
Polyalkylene glycol	9038-95-3	-	-	-	-
Iodine	7553-56-2	X	X	X	-
Dipropylene glycol methyl ether	34590-94-8	X	X	X	-

CERCLA/ SARA

Ingredient(s)	CAS #	Weight %	CERCLA/SARA RQ (lbs)	Section 302 TPQ (lbs)	Section 313

Phosphoric acid	7664-38-2	20 - 30%	5000		
Dipropylene glycol methyl ether	34590-94-8	1 - 5%			X

Ingredient(s)	CAA HAP	CAA ODS	CWA Priority Pollutants
Dipropylene glycol methyl ether	X		

SARA 311/312 Hazard Categories

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

Canada

WHMIS hazard class: E Corrosive material.



16. OTHER INFORMATION

Reason for revision: Not applicable
Prepared by: NAPRAC
Additional advice:

- Does not contain an added fragrance
- This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations

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