



TWIST

HMIS		NFPA	Personal protective equipment	
Health	2	2	 	
Fire Hazard	2	2		
Reactivity	0	0		

Version Number: 3

Preparation date: 2005-10-31

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: TWIST
MSDS #: 04481_HX
Product code: 04481010, 04481050, 04481100, 04481700
Recommended use: MULTI-PURPOSE CLEANER.

Manufacturer, importer, supplier:
 JohnsonDiversey, Inc.
 3630 E. Kemper Rd.
 Cincinnati, OH 45241
 Phone: 1-800-438-2647
 Canadian Headquarters
 JohnsonDiversey - Canada, Inc.
 2401 Bristol Circle
 Oakville, Ontario L6H 6P1
 Phone: 1-800-668-3131

Emergency telephone number: 1-800-851-7145 (Prosar); 1-651-917-6133 (Int'l Prosar); 01-800-710-3400 (México)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING. CAUSES EYE AND SKIN IRRITATION. COMBUSTIBLE LIQUID AND VAPOR. HARMFUL OR FATAL IF SWALLOWED. MAY CAUSE ALLERGIC SKIN REACTION.

Principle routes of exposure: Eyes. Skin contact. Inhalation.
Eye contact: Severe eye irritation.
Skin contact: Severe skin irritation.
Inhalation: May be irritating to nose, throat, and respiratory tract.
Ingestion: May be irritating to mouth, throat and stomach.

3. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS

Ingredient	CAS #	Weight %	LD50 Oral	LD50 Dermal	LC50 Inhalation
Terpinolene	586-62-9	10 - 20%	4390 mg/kg (rat)	Not available	Not available
Diocetyl sodium sulfosuccinate	577-11-7	1 - 5%	1900 mg/kg (rat)	Not available	Not available
Ethyl alcohol	64-17-5	0.1 - 1.5%	7060 mg/kg (rat)	Not available	20 g/kg/10H (rat)

4. FIRST AID MEASURES

Eye contact: Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention.
Skin contact: Flush immediately with plenty of water for at least 15 minutes. Get medical attention.
Inhalation: If breathing is affected, remove to fresh air. Get medical attention.
Ingestion: Immediately drink one cupful of water or milk. Get medical attention.
Aggravated Medical Conditions: Persons with pre-existing skin disorders may be more susceptible to irritating effects.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, water spray, foam, carbon dioxide.
Specific hazards: Thermal decomposition can lead to release of irritating gases and vapors.
Unusual hazards: None known
Specific methods: No special methods required.
Autoignition temperature: No information available.

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: None.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Ensure adequate ventilation. Remove all sources of ignition. Use personal protective equipment.
Environmental precautions and clean-up methods: Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Handling:

Avoid contact with skin, eyes and clothing. Do not taste or swallow. Remove and wash contaminated clothing and footwear before re-use. Wash thoroughly after handling. FOR COMMERCIAL AND INDUSTRIAL USE ONLY. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

Storage:

Protect from freezing. Keep tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:

Use only in well-ventilated areas . In case of insufficient ventilation wear suitable respiratory equipment..

Personal Protective Equipment

Eye protection: Safety glasses with side-shields.
Hand protection: Chemical resistant gloves Includes neoprene gloves
Skin and body protection: If major exposure is possible, wear suitable protective clothing and footwear.
Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment. Use only in well-ventilated areas. If aerosols, mists, or vapors are not adequately controlled by ventilation, use appropriate respiratory protection to avoid over-exposure .
Hygiene measures: Avoid contact with skin, eyes and clothing . Remove and wash contaminated clothing and footwear before re-use. Wash hands before breaks and immediately after handling the product .

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid	Appearance:	Liquid
Color:	Amber	Boiling point/range:	>200 (°F) >100 (°C)
Odor:	Lemon	Melting point/range:	Not determined
Specific gravity:	1.00 g/mL	pH:	8.5
Dilution pH:	8.23 (1%)	Density:	8.345
Bulk density:	No information available	Decomposition temperature:	Not determined
Vapor density:	No information available	Autoignition temperature:	No information available
Evaporation rate:	No information available	Solubility:	Soluble
Solubility in other solvents:	No information available	VOC:	15.5%
Viscosity:	No information available	Flash point:	144 (°F) 97.5 (°C)
Partition coefficient (n-octanol/water):	No information available		

10. STABILITY AND REACTIVITY

Stability: The product is stable
Polymerization: Hazardous polymerisation does not occur.
Hazardous decomposition products: Oxides of carbon .
Materials to avoid: Strong oxidising agents.
Conditions to avoid: Stable at normal conditions. Keep away from open flames, hot surfaces and sources of ignition.

11. TOXICOLOGICAL INFORMATION

Acute toxicity LD50 estimated to be 3000 - 4000 mg/kg
Component Information: See Section 3
Chronic toxicity: Repeated skin exposure can cause sensitization .
Specific effects
Carcinogenic effects: No information available.
Mutagenic effects: None known
Reproductive toxicity: None known
Target organ effects: None known

HAZARDOUS COMPONENTS

Ingredient	CAS #	NTP	IARC	OSHA
Ethyl alcohol	64-17-5	Listed.		

12. ECOLOGICAL INFORMATION

Environmental Information: When used for its intended purpose this product should not cause adverse effects in the environment

13. DISPOSAL CONSIDERATIONS**Waste from residues / unused products:**

Dispose of according to all federal, state and local applicable regulations

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), Canada (DSL/NDL).

U.S. Regulations

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

STATE RIGHT TO KNOW

Ingredient	CAS #	MARTK:	NJRTK:	PARTK:	RIRTK:	ILRTK:	CTRTK:
Water	7732-18-5	-	-	-	-	-	-
Diethanolamine dodecylbenzene sulfonate	26545-53-9	-	-	-	-	-	-
Dioctyl sodium sulfosuccinate	577-11-7	-	-	-	-	-	-
Ethyl alcohol	64-17-5	Listed	Listed	Listed	Listed	Listed	Listed
Alcohol ethoxylate	68002-97-1	-	-	-	-	-	-
Terpinolene	586-62-9	-	-	-	-	-	-

CERCLA / SARA

Ingredient	CAS #	Weight %	CERCLA/SARA RQ (lbs)	Section 302 TPQ (lbs)	Section 313
Ethyl alcohol	64-17-5	0.1 - 1.5%	100		

CAA HAP/CAA ODS/CWA Priority Pollutants: None

SARA 311/312 Hazard Categories

Immediate: Y
Delayed: Y
Fire: Y
Reactivity: N
Sudden Release of Pressure: N

Canada

WHMIS hazard class: B3 Combustible liquid , D2B Toxic materials .

**16. OTHER INFORMATION**

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

Notice to Reader: This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to the accuracy of the information contained within. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.