
MATERIAL SAFETY DATA SHEET

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Revised 2/02/04
Replaces 8/12/03
Printed 2/03/04

TWIST**MSDS ID: 04481**

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: TWIST

Product Descriptor: Multi-Purpose Solvent Cleaner

MANUFACTURER: JOHNSON DIVERSEY, INC.

EMERGENCY PHONE NUMBER: (800) 851-7145

3630 E. KEMPER ROAD

CINCINNATI, OH. 45241

II. HAZARDOUS COMPONENTS

Component Name	CAS Number	%	Exposure Limits	Units
TERPENE HYDROCARBONS	68956-56-9	5 - 15%	None est.	

III. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

WARNING-Contains chemicals that may cause irritation to eyes and skin. May be harmful if swallowed. Wear eye protection such as goggles or side shield safety glasses, clothing and rubber gloves to prevent prolonged skin contact. Wash after handling. Contain spills and runoff which may harm the environment. POSSIBLE ROUTES OF ENTRY: Ingestion, Skin and Inhalation.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

ACUTE: EYES: Irritation with pain, swelling and redness may develop. SKIN: Irritation or dryness develop with long contact. INGESTION: If swallowed, diarrhea, nausea and vomiting may occur. INHALATION: Irritation of respiratory tract may develop.

CHRONIC: Same as Acute Effects.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Dermatitis and sensitive skin.

TARGET ORGAN(S) OF CHEMICAL HAZARD(S): Eyes and skin.

IV. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for 15 minutes. Get medical attention.

SKIN: Flush thoroughly with plenty of water. Wash with soap and water. Remove contaminated clothes and shoes and clean before reuse. Get medical attention for any painful, red or injured skin.

INGESTION: If swallowed, rinse mouth with water. Dilute by drinking several glasses of water. Do not induce vomiting. Get prompt medical attention. NOTE: Never give fluids by mouth to an unconscious person.

INHALATION: Remove to fresh air. If breathing difficulties arise, get medical attention.

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V. FIRE FIGHTING MEASURES

FLASH POINT (degrees F): 144 FLAME EXTENSION: N/A
FLAMMABLE LIMITS IN AIR BY VOLUME: LEL: ND UEL: ND
UNUSUAL FIRE OR EXPLOSIVE HAZARDS: Product may burn if liquid is evaporated by heat or fire.
EXTINGUISHING MEDIA: Water spray, CO2, foam or dry powder.
FIRE FIGHTING INSTRUCTIONS: Wear full protective gear and positive pressure breathing apparatus (SCBA) in fire area.
SPECIAL INSTRUCTIONS: Contain runoff. Prevent from entering sewer or storm drain.

VI. ACCIDENTAL RELEASE MEASURES

IF MATERIAL IS RELEASED OR SPILLED:
Contain spilled product. Wear protective clothing. Soak up liquid with a commercial absorbant or sand. Sweep up or shovel into chemical waste container and dispose of in accordance with governmental regulations. Flush area with water.
This product does not contain a reportable quantity (RQ) under CERCLA.

VII. HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS: Store in a cool, dry area. Keep from freezing. If frozen, warm to thaw and mix for use. Keep container closed when not in use. Wear protective gear when handling or using. Do not pressurize container to empty.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE/FACE PROTECTION: Face shield if contact or splash hazard exists. Eye wash in use area.
PROTECTIVE GLOVES: Chemical resistant.
RESPIRATORY PROTECTION: Not normally required.
OTHER PROTECTIVE CLOTHING/EQUIPMENT: Not normally required.
ENGINEERING CONTROLS:
MECHANICAL VENTILATION: Normal room ventilation should be sufficient to control airborne levels.
LOCAL VENTILATION: Use explosion-proof ventilation equipment for vapors or fumes.

IX. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear yellow liquid with lemon odor

BOILING POINT (DEG F): 212	FREEZING POINT: ND
SPECIFIC GRAVITY/BULK DENSITY: 1.0	
pH: 8.5	pH 1% SOLUTION: 8.23
VOLATILE BY VOLUME: <70	
SOLUBILITY IN WATER: Soluble	
VAPOR PRESSURE(mmHg): 17.5 at 20 C	VAPOR DENSITY: ND

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X. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Product stable.

INCOMPATIBILITY WITH OTHER MATERIALS: Strong acids, strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Incomplete combustion forms oxides of carbon and nitrogen.

HAZARDOUS POLYMERIZATION: None known.

XI. TOXICOLOGICAL INFORMATION

Any hazardous effects of the product mixture are based on information for each chemical part. See Section II for amounts of hazardous materials.

TOXICITY TEST DATA:

No data available.

XII. ECOLOGICAL INFORMATION

ECOTOXICITY DATA: Contains biodegradable, synthetic detergents that may be toxic to aquatic forms. Discharge waste product only to sanitary sewer or on-site waste treatment.

ECOTOXICITY TEST DATA: No data available.

ENVIRONMENTAL FATE: No data available.

XIII. DISPOSAL CONSIDERATIONS

RCRA REGULATED: Not Regulated.

Discharge diluted product to industrial sewer. Use product in container until empty. Triple rinse container with water and add to process. Recycle or dispose of container by product labeling or governmental regulations.

XIV. TRANSPORT INFORMATION

Please refer to the Bill of Lading/receiving documents for up to date shipping information.

XV. REGULATORY INFORMATION

U.S. Federal Regulations:

TSCA: All ingredients in this product are on TSCA inventory.

HAPS: Contains no hazardous air pollutants.

VOC CONTENT (EPA Method 24A): % VOC: 7.2 Lb/Gal VOC: 0.6

CERCLA/EPCRA:

Section 313 Toxic Chemicals: None

SARA Section 311/312:

ACUTE: YES CHRONIC: NO FIRE: YES REACTIVITY: NO

SUDDEN RELEASE OF PRESSURE: NO

LISTED CARCINOGEN: NONE

NTP: NO IARC: NO OSHA: NO

HMIS RATINGS: HEALTH: 2 FIRE: 2 REACTIVITY: 0

PERSONAL PROTECTIVE EQUIPMENT: C

NFPA RATING: HEALTH: 2 FIRE: 2 REACTIVITY: 0 SPECIAL:

STATE RIGHT-TO-KNOW INFORMATION:

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XV. REGULATORY INFORMATION (Cont.)

TERPENE HYDROCARBONS - CAS #68956-56-9

WATER - CAS #7732-18-5

ALCOHOL ETHOXYLATE - CAS #68002-97-1

SODIUM DIOCTYL SULFOSUCCINATE - CAS #577-11-7

ETHANOLAMINE DODECYLBENZENE SULFONATE - CAS #27323-41-7

CALIFORNIA PROPOSITION 65:

None of the ingredients are on the California proposition 65 list.

XVI. OTHER INFORMATION

DISCLAIMER: The information contained in this material safety data sheet is based on the knowledge of this specific product and current national legislation. It applies to the product as sold, use dilutions may be less hazardous. It may not be valid for this material if used in combination with any other materials or in a process. It is the user's responsibility to evaluate the handling, and use.