

DIV-O-KLEEN EF

MSDS ID: 1600024

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: DIV-O-KLEEN EF

Product Descriptor: ALKALINE 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
D-LIMONENE	5989-27-5	1 - 5%	None Established	
SODIUM DODECYLBENZENE SULFONATE	25155-30-0	1 - 5%	None established	
SODIUM HYDROXIDE	1310-73-2	5 - 15%	TLV-C 2	MG/M3

III. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

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

POSSIBLE ROUTES OF ENTRY: Eye contact. Skin contact. Inhalation.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

ACUTE: EYES: Corrosive. May cause permanent damage including blindness.

SKIN: Corrosive. May cause permanent damage. INGESTION:

Corrosive. May cause burns to mouth, throat and stomach.

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

CHRONIC: Same as acute effects.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Individuals with chronic respiratory disorders such as asthma, chronic bronchitis or emphysema, etc., may be more susceptible to irritating effects.

TARGET ORGAN(S) OF CHEMICAL HAZARD(S): Eyes, skin, respiratory tract, and gastrointestinal tract.

IV. FIRST AID MEASURES

EYES: Immediately flush eyes with running water for at least 15 minutes keeping eyelids open. Get medical attention immediately.

SKIN: Flush immediately with plenty of water for at least 15 minutes. Get medical attention immediately.

INGESTION: Do not induce vomiting. Immediately drink one cupful of water or milk. Never give anything by mouth to an unconscious person. Get medical attention immediately.

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

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V. FIRE FIGHTING MEASURES

FLASH POINT (degrees F): 116.6 FLAME EXTENSION: N/A
FLAMMABLE LIMITS IN AIR BY VOLUME: LEL: N/E UEL: N/E
UNUSUAL FIRE OR EXPLOSIVE HAZARDS: Toxic fumes or vapor may form during fire.
Liquid produces hydrogen on contact with soft, active metals.
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: Spilled product may cause slippery surface and fall hazard.

VI. ACCIDENTAL RELEASE MEASURES

IF MATERIAL IS RELEASED OR SPILLED:
Contain spill. Wear protective clothing. Soak up or absorb liquid on suitable absorbent material. Collect and place in chemical waste container. Dispose of in accordance with local, State and Federal regulations. Flush spill area with water.
The Reportable Quantity of Sodium Hydroxide is 1051 gallons or 10,000 Lbs. The Reportable Qunatity of Sodium Dodecylbenzene Sulfonate is 6,183 gallons or 58,823 Lbs.

VII. HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS: Avoid contact with eyes, skin and clothing. Do not taste or swallow. Avoid breathing vapors or spray 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 handing the empty container and residue. FOR COMMERCIAL & INDUSTRIAL USE ONLY. Keep container tightly closed. Protect from freezing. Store in a dry, cool and well-ventilated area. KEEP OUT OF REACH OF CHILDREN.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE/FACE PROTECTION: Chemical splash goggles.
PROTECTIVE GLOVES: Chemical resistant gloves. Includes: Neoprene gloves.
RESPIRATORY PROTECTION: If mists/vapors are not adequately controlled by ventilation, use appropriate respiratory protection to avoid over exposure. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions conditions warrant a respirator's use.
OTHER PROTECTIVE CLOTHING/EQUIPMENT: If major exposure is possible, wear suitable protective clothing and footwear.
ENGINEERING CONTROLS:
VENTILATION: Good general ventilation should be sufficient to control airborne levels. Respiratory protection is not required if good ventilation is maintained.

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IX. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Amber liquid, mild orange odor.

BOILING POINT (DEG F): >200	FREEZING POINT: <40 F
SPECIFIC GRAVITY/BULK DENSITY: 1.14	
pH: >12.5	pH 1% SOLUTION: 12.1
VOLATILE BY VOLUME: 70	
SOLUBILITY IN WATER: Soluble	
VAPOR PRESSURE(mmHg): 17.5 at 20 C	VAPOR DENSITY: 17.3

X. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Product stable.
INCOMPATIBILITY WITH OTHER MATERIALS: Acids; Aluminum; Halogenated compounds
HAZARDOUS DECOMPOSITION PRODUCTS: Incomplete combustion forms; oxides of sulfur; oxides of carbon
HAZARDOUS POLYMERIZATION: None known.

XI. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL TESTING: Toxicological testing has not been performed on the product. Listed below is the available toxicology test data for components of the product.

TOXICITY TEST DATA:

Sodium Hydroxide:

Acute Oral LD50 (rat)	500 mg/kg (RTECS)
Acute Skin LD50 (rabbit)	1350 mg/kg (MSI)

D-Limonene:

Acute Oral LD50 (rat)	>5 gm/kg
Acute Dermal LD50 (rabbit)	>5 gm/kg
Eye Irritation:	severe
Skin Irritation:	severe

XII. ECOLOGICAL INFORMATION

ECOTOXICITY TEST DATA:

No data available.

ENVIRONMENTAL FATE: No data available.

XIII. DISPOSAL CONSIDERATIONS

RCRA REGULATED: Concentrated product is considered to be D001 - Igniteable, and D002 - Corrosive, if declared hazardous waste.
Discharge diluted product to industrial sewer in accordance with discharge permit or local POTW regulations. Use product in container until empty. Rinse container with water. Recycle or dispose of container according to product labeling or governmental regulations.

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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: NONE

VOC CONTENT (EPA Method 24A): % VOC: 4.8 Lb/Gal VOC: 0.46

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: 3 FIRE: 2 REACTIVITY: 0

PERSONAL PROTECTIVE EQUIPMENT: D

NFPA RATING: HEALTH: 3 FIRE: 2 REACTIVITY: 0 SPECIAL: None

STATE RIGHT-TO-KNOW INFORMATION:

WATER - CAS# 7732-18-5

SODIUM HYDROXIDE - CAS# 1310-73-2

SODIUM DODECYLBENZENE SULFONATE - CAS# 25155-30-0

d-LIMONENE - CAS# 5989-27-5

LINEAR ALCOHOL ETHOXYLATE - CAS# 68131-39-5

SODIUM XYLENE SULFONATE - CAS# 1300-72-7

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.