

**Section 1: Identification of the substance/mixture and of the company/undertaking**

PRODUCT NAME	DV-CLEAN, DV-CLEAN-GAL
OTHER NAMES:	80% Ethanol Surface Cleaner
CAS Registry Number:	Not Available.
UN/NA Number(s):	UN1987
Molecular Formula:	Not Available.
DISTRIBUTOR:	DAC TECHNOLOGIES
ADDRESS	3630 WEST MILLER RD., SUITE 350, GARLAND TX 75041 USA
TELEPHONE:	800.800.1550
FAX:	972.677.2800
EMERGENCY TELEPHONE	(Chemtrec) (800)-262-8200

**Recommended use of the chemical and restrictions on use**

Recommended use: Surface Sanitizer

Restrictions on use: This product should only be used on non-porous surfaces. It will likely be most effective if sprayed and allowed to dry naturally. While this material is not considered hazardous, this SDS contains valuable information critical to the safe handling and proper use of the product for industrial workplace conditions as well as unusual and unintended exposures such as large spills. This SDS should be retained and available for employees and other users of this product.

# SAFETY DATA SHEET

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012  
and the Hazardous Products Regulations (HPR) WHMIS 2015

Date of issue:

Version: 1.0

## Section 2: Hazards Identification

### 2.1. Classification of the

substance or mixture GHS-

US

Flammable Liquid 3

Eye Irritant 2A

### 2.2. Label elements

#### 2.3. GHS-US and GHS-CA labelling

#### 2.4.

Hazard pictograms (GHS-US, GHS-CA):



Signal word (GHS-US, GHS-CA):

Warning

Hazard statements (GHS-US, GHS-CA):

H226 Flammable liquid and vapor.

H319 Causes serious eye irritation.

Precautionary statements (GHS-US, GHS-CA):

#### Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge. P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ eye protection/ face protection.

#### Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

#### Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

#### Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

### 2.5. Other hazards

Vapors may form explosive mixture with air

### 2.6. Unknown acute toxicity (GHS US and GHS CA)

Not classified based on available information.

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## Section 3: Composition/Information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Chemical Name	CAS Registry	Concentration %	EU EINECS/ELINCS
Ethanol	64-17-5	79.36%	200-578-6
Water	7732-18-5	11.05%	231-791-2
Hydrogen Peroxide	7722-84-1	4.18%	231-765-0
Isopropyl alcohol	67-63-0	3.96%	200-661-7
Glycerin	56-81-5	1.45%	200-289-5

## Section 4: First Aid Measures

### 4.1. Description of first aid measures

General Advice:	In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.
First-aid measures if inhaled:	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
First-aid measures in case of skin contact:	Wash with water and soap as a precaution. Get medical attention if symptoms occur.
First-aid measures in case of eye contact:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
First-aid measures in case of skin contact:	Wash with water and soap as a precaution. Get medical attention if symptoms occur. If easy to do, remove contact lens, if worn.
If swallowed:	If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

### 4.2. Most important symptoms and effects, both acute and delayed

Most important symptoms and effects, both acute and delayed:	Cause serious eye injury.
Symptoms/injuries after skin contact:	No known adverse effects. May cause slight skin irritation in sensitive individuals.
Symptoms/injuries after ingestion:	May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

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## Section 5: Fire-Fighting Measures

Flammable Properties:

Flash Point: 25 deg C

### 5.1. Extinguishing media

Suitable extinguishing media Water Spray. Carbon dioxide. Alcohol- resistant foam. Dry chemical.

Unsuitable extinguishing media High volume water jet.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard Do not use a solid water stream as it may scatter and spread fire. Flash back possible over considerable distance. Vapors may form explosive mixtures with air. Exposure to combustion products may be a hazard to health.

Specific extinguishing methods: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Remove undamaged containers from if it is safe to do so. Evacuate area.

Protection during firefighting Keep upwind of fire. Wear full firefighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Use water spray to keep fire-exposed containers cool.

### 5.3. Advice for firefighters

Protection during firefighting Keep upwind of fire. Wear full firefighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Use water spray to keep fire- exposed containers cool.

## Section 6: Accidental Release Measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.

### 6.2. Methods and material for containment and cleaning up

For containment Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

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Methods for cleaning up

Scoop up material and place in a disposal container. Provide ventilation.  
For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent.  
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.  
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

## 6.3 Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

## Section 7: Handling and Storage

### 7.1. Precautions for safe handling

Additional hazards when processed

Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling

Keep away from sources of ignition - No smoking. Avoid contact with eyes. Avoid breathing vapour or mist. Handle and open container with care. Take precautionary measures against static discharge. Use only non-sparking tools. When using do not eat or drink. Use only outdoors or in a well-ventilated area.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures

Proper grounding procedures to avoid static electricity should be followed.

Storage Conditions

Keep out of the reach of children. Keep container tightly closed and in a well-ventilated place. Keep away from heat, sparks, and flame. Keep cool.

Materials to avoid:

Do not store with the following product types: Strong oxidizing agents. Organic peroxides, flammable solids, gas, pyrophoric liquids or solids, Explosives, self-heating substances or mixtures.

### 7.3. Specific end use(s)

Keep out of the reach of children.

## Section 8: Exposure Controls/Personal Protection

### 8.1. Control parameters

#### Ethanol (64-17-5)

ACGIH	ACGIH STEL (ppm)	1000 ppm
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1900 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
IDLH	US IDLH (ppm)	3300 ppm (10% LEL)
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1900 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm

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## Isopropyl alcohol

(67-63-0)

ACGIH	ACGIH STEL (ppm)	400 ppm
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	980 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	400 ppm
IDLH	US IDLH (ppm)	2000 ppm (10% LEL)
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	980 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA) (ppm)	400 ppm

## 8.2. Exposure controls

Appropriate engineering controls	Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits
Hand protection	Wear impervious gloves.
Eye protection	Safety glasses with side shields.
Skin and Body protection	Wear suitable protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental exposure controls	Maintain levels below Community environmental protection thresholds.
Other Information	Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Physical state: Liquid  
Appearance: Clear  
Colour: Colorless  
Odour: Alcohol  
Odour threshold: No data available  
pH: 6.0-7.50  
Melting Point: No data available  
Boiling Point: No data available  
Flash point: 25 deg C  
Relative evaporation rate: no data available  
Flammability (solid, gas): not applicable  
Explosive limits: No data available  
Explosive properties: No data available  
Oxidizing properties: No data available  
Vapour pressure: No data available  
Density: 0.847at 20 deg C (water = 1)  
Relative vapour density: no data available  
Solubility: Infinite  
Partition coefficient: n-octanol/water: No data available

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Auto-ignition temperature: No data available  
Decomposition temperature: No data available  
Viscosity: No data available  
Viscosity, kinematic: No data available  
Viscosity, dynamic: No data available  
Molecular Weight: No data available  
Conversion Factor: No data available

## 9.2. Other information

No additional information available

## SECTION 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2. Chemical stability

Stable under normal storage conditions. May form flammable/explosive vapour-air mixture. Keep in a cool place.

### 10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use. Flammable liquid and vapor.  
Vapors may form explosive mixture with air. Can react with strong oxidizing agents.

### 10.4. Conditions to avoid

Heat. Incompatible materials. Ignition sources.

### 10.5. Incompatible materials

Oxidizing agents.

### 10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

## Section 11: Toxicological Information

### 11.1. Information on toxicological effects

Isopropyl alcohol (67-63-0)

Inhalation

LC50 Rat: 72.6mg/l/4h

Oral LD50 Rat: 4396 mg/kg

LD50 dermal Rabbit 12870 mg/kg

LC50 dermal Rat 12800 mg/kg

Neurotoxicity:	This product contains isopropyl alcohol, a central nervous system target
Developmental:	This product contains isopropyl alcohol, a developmental hazard.
Germ cell mutagenicity:	No information available for product.
Reproductive:	No information available for product.
Carcinogenicity:	ACGIH A4- Not classified as a Human Carcinogen
Target Organs:	Skin, eyes, CNS, Kidney, Developmental and respiratory system.

### Ethanol (64-17-5)

LD50 oral rat 7060 mg/kg

LC50 inhalation rat 124.7 mg/l/4h

Skin corrosion/irritation:	Based on available data, classification criteria are not met.
Serious eye damage/irritation:	Causes eye irritation.
Respiratory or skin sensitization:	Based on available data, classification criteria are not met.
Germ cell mutagenicity:	May cause genetic defects.

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Date of issue:

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Carcinogenicity: May cause cancer.

## Ethanol (64-17-5)

IARC group

1 - Carcinogenic to humans

Reproductive toxicity

May damage fertility or the unborn child.

Specific target organ toxicity (single exposure)

Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure)

Based on available data, the classification criteria are not met

Aspiration hazard

Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation

No known adverse effects. May cause nausea, dizziness or vomiting if large quantities are inhaled.

Symptoms/injuries after skin contact

No known adverse effects. May cause slight skin irritation in sensitive individuals.

Symptoms/injuries after eye contact

Causes eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva

Symptoms/injuries after ingestion

May be harmful if swallowed in large quantities. May cause stomach distress, nausea or vomiting. Signs of alcohol intoxication.

## Section 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Ecology - general: May cause long-term adverse effects in the aquatic environment.

### 12.2. Persistence and degradability

Not established

### 12.3. Bio accumulative potential

Not established.

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on the global warming: No known ecological damage caused by this product.

## Section 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

Review federal, provincial and local government requirements prior to disposal. Store material for disposal as indicated in Storage Conditions. Disposal by controlled incineration or secure landfill may be acceptable.

## SECTION 14. TRANSPORT INFORMATION

CANADIAN TRANSPORTATION OF DANGEROUS GOODS (TDG) SHIPPING INFORMATION

### International Regulation:

UNRTDG



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Date of issue:

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Shipping Name and Description: UN1987

Proper Shipping name: ALCOHOLS, N.O.S (ethanol, isopropyl alcohol)

Class: 3

Group/Category: III

Labels: 3

## IATA-DGR

Shipping Name and Description: UN1987

Proper Shipping name: ALCOHOLS, N.O.S (ethanol, isopropyl alcohol)

Class: 3

Packaging Group/Category: III

Labels: Flammable Liquids

Packing instructions (cargo aircraft): 366

Packing instructions (Passenger aircraft): 35

## IMDG-Code

Shipping Name and Description: UN1987

Proper Shipping name: ALCOHOLS, N.O.S (ethanol, isopropyl alcohol)

Class: 3

Packaging Group/Category: III

EmS Code F-E, S-D

Marine pollutant: yes

## Domestic regulation

Shipping Name and Description: UN1987

Proper Shipping name: ALCOHOLS, N.O.S (ethanol, isopropyl alcohol)

Class: 3

Packaging Group/Category: III

Labels: FLAMMABLE LIQUID

ERG Code 127

Marine pollutant: yes

## Section 15: Regulatory Information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) 1988

CCOHS WHMIS 1988 Classification:

D2B - Poisonous and infectious material - Other effects - Toxic

WHMIS 1988 Health Effects Criteria Met by this Chemical: D2B - Eye irritation - toxic - other

WHMIS 1988 Ingredient Disclosure List: Included for disclosure at 0.1% or greater.

## EUROPEAN UNION (EU) CLASSIFICATION AND LABELLING INFORMATION

This EU classification information reflects the 29th Adaptation to Technical Progress (ATP) of Council Directive 67/548/EEC. The EU has adopted the 30th ATP (2008/58/EC of 21 August 2008) and 31st ATP (2009/2/EC of 15 January 2009) of this Council Directive. See: <http://ecb.jrc.ec.europa.eu/esis> for current information.

EU Classification:

EU Risk Phrases:

EU Safety Phrases: Keep out of reach of children.

\* Keep container tightly closed. Keep away from sources of ignition - No smoking.

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\*This safety phrase can be omitted from the label when the substance or preparation is sold for industrial use only.

## SECTION 16. OTHER INFORMATION

Other information: None.