



Date Issued: 9/16/2011

Material Safety Data Sheet

Product Name: **D12 - Glass Cleaner Concentrate**

1. Product and Company Information

P & S Sales, Inc
20943 Cabot Blvd.
Hayward CA 94545

Emergency Number: 800-255-3924
Customer Service: 510-732-2628
Business Fax: 510-732-2632

Generic Description: Thin clear green liquid with fruity isopropanol odor

NFPA Profile: Health 1 Flammability 3 Reactivity 0

2. OSHA Hazard Components

CAS Number	Wt %	Component Name
67-63-0	30-40%	Isopropanol, 2-Propanol
107-98-2	2-10%	1-methoxy-2-propanol

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non-hazardous, and/or present at amounts below reportable limits.

3. Effects of Overexposure

Inhalation: Inhalation of vapors irritates the respiratory tract. Exposure to high concentrations has a narcotic effect, producing symptoms of dizziness, drowsiness, headache, staggering, unconsciousness and possibly death.

Ingestion: Can cause drowsiness, unconsciousness, and death. Gastrointestinal pain, cramps, nausea, vomiting, and diarrhea may also result. The single lethal dose for a human adult = about 250 mls (8 ounces).

Skin Contact: May cause irritation with redness and pain. May be absorbed through the skin with possible systemic effects.

Eye Contact: Vapors cause eye irritation. Splashes cause severe irritation, possible corneal burns and eye damage.

Chronic Exposure: Chronic exposure may cause skin effects.

Aggravation of Pre-existing Conditions: Persons with pre-existing skin disorders or impaired liver, kidney, or pulmonary function may be more susceptible to the effects of this agent.

4. First Aid Measures

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Give large amounts of water to drink. Never give anything by mouth to an unconscious person.

Get medical attention.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes. Call a physician if irritation develops.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. Fire Fighting Measures

Flash Point 12°C (54°F) CC	Upper Flamability Limit	12.7 %
Auto Ignition 399°C (750°F)	Lower Flamability Limit	2.0 %



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Listed fire data is for Pure Isopropyl Alcohol.

Explosion:

Above flash point, vapor-air mixtures are explosive within flammable limits noted above.

Contact with strong oxidizers may cause fire or explosion. Vapors can flow along surfaces to distant ignition source and flash back. Sensitive to static discharge.

Fire Extinguishing Media:

Water spray, dry chemical, alcohol foam, or carbon dioxide. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak and disperse vapors.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures.

7. Handling and Storage

Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. Small quantities of peroxides can form on prolonged storage. Exposure to light and/or air significantly increases the rate of peroxide formation. If evaporated to a residue, the mixture of peroxides and isopropanol may explode when exposed to heat or shock.

8. Exposure Controls and Personal Protection

67-63-0	Isopropanol, 2-Propanol	200 ppm TLV (ACGIH 8 hour)
		400 ppm (OSHA PEL) TWA
107-98-2	1-methoxy-2-propanol	100 ppm (ACGIH 8 hour) TWA
		150 ppm (ACGIH 15 min) STEL

VENTILATION

Use only with ventilation sufficient to prevent exceeding recommended exposure limit or buildup of explosive concentrations of vapor in air. No smoking, or use of flame or other ignition sources.

RESPIRATORY PROTECTION

Use supplied-air respiratory protection in confined or enclosed spaces, if needed.

PROTECTIVE GLOVES

Use chemical-resistant gloves, if needed, to avoid prolonged or repeated skin contact.



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Use chemical-resistant gloves, if needed, to avoid prolonged or repeated skin contact.

EYE PROTECTION

Use splash goggles or face shield when eye contact may occur.

OTHER PROTECTIVE EQUIPMENT

Use chemical-resistant apron or other impervious clothing, if needed, to avoid contaminating regular clothing, which could result in prolonged or repeated skin contact.

WORK PRACTICES / ENGINEERING CONTROLS

To prevent fire or explosion risk from static accumulation and discharge, effectively bond and/or ground product transfer system in accordance with (THE) National Fire Protection Association PUBLICATIONS.

9. Physical and Chemical Properties**Physical State** liquid**Color** Green**Vapor Press** 44 mmHg**pH** 5.5**Specific Gravity** .906**Viscosity** thin**Vapor Density (Air=1)** 2.1**Melting Point °F** -11°F**Odor** IPA/Fruity**Water Solubility** complete**VOC Content** 39.5%**10. Stability and Reactivity****Stability** Stable**Hazardous Polymerization** Not Expected to Occur**Conditions to Avoid**

Keep away from extreme heat, Strong Acids, Alkalies and Oxidizers such as Chlorine, other Halogens, Hydrogen Peroxide and Oxygen

Hazardous Decomposition Products

No substances are readily identifiable from composition but no degradation data is available.

11. Toxicological Information

Oral rat LD50: 5045 mg/kg; skin rabbit LD50: 12.8 gm/kg; inhalation rat LC50: 16,000 ppm/8-hour; investigated as a tumorigen, mutagen, reproductive effector.

12. Ecological Information**Environmental Fate:**

When released into the soil, this material is expected to quickly evaporate, may leach into groundwater and may biodegrade to a moderate extent. When released to water, this material is expected to quickly evaporate, have a half-life between 1 and 10 days and may biodegrade to a moderate extent. This material is not expected to significantly bioaccumulate. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals, to have a half-life between 1 and 10 days and may be removed from the atmosphere to a moderate extent by wet deposition.

Environmental Toxicity: The LC50/96-hour values for fish are over 100 mg/l. This material is not expected to be toxic to aquatic life.

13. Disposal Information



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Options for disposal of this product may depend on the conditions under which it was used. To determine the proper method of disposal, refer to RCRA (40 CFR 261), as well as federal EPA and state and local regulations.

Please refer to Sections 5, 6 and 15 for additional information.

14. Transportation Information

Domestic (Land, D.O.T.)

Proper Shipping Name: UN1993, Flammable Liquid, N.O.S. (Isopropanol), PG II
Information reported for product/size: 32 oz up to 55 gallon drum.

International (Water, I.M.O.)

Proper Shipping Name: UN1993, Flammable Liquid, N.O.S. (Isopropanol), PG II
Information reported for product/size: 32 oz up to 55 gallon drum.

15. Regulatory Information

THRESHOLD PLANNING QUANTITY (TPQ), EPA REGULATION 40 CFR 355
(SARA Sections 301-304)

No TPQ for product or any constituent greater than 1% or 0.1% (carcinogen).

TOXIC CHEMICAL RELEASE REPORTING, EPA REGULATION 40 CFR 372 (SARA Section 313)
Isopropanol (67-63-0) Listed

HAZARDOUS CHEMICAL REPORTING, EPA REGULATION 40 CFR 370 (SARA Sections 311-312)

EPA Hazard Classification Codes: Acute, Chronic, Fire

TOXIC SUBSTANCES CONTROL ACT (TSCA)

This product does not contain polychlorinated biphenyls (PCB's).

All components of this product are listed on the U.S. TSCA inventory.

This product must be diluted 10 parts water to 1 part Concentrate to meet CARB Glass cleaner requirements of < 4% VOC.

16. Other Information

The information and recommendations are offered for the user's consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use. If buyer repackages this product, legal counsel should be consulted to insure proper health, safety and other necessary information is included on the container.

