

BEBBINGTON INDUSTRIES SAFETY DATA SHEET

ETHANOL DENATURED D2A

SECTION 1 - IDENTIFICATION

Product identifier used on the label: ETHANOL DENATURED D2A

SYNONYMS: 2A alcohol, 2A solvent, DAG-2A

Recommended use and restrictions on use:

General Purpose Solvent. For professional use only.

Manufacturer/Supplier

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SECTION 2 – HAZARD IDENTIFICATION

CLASSIFICATION

Flammable Liquids (Category 2)

Eye irritation (Category 2B)

Skin irritation (Category 2)

Specific target organ toxicity - single exposure (Category 3)

HAZARD PICTOGRAMS



LABEL ELEMENTS

Signal Word DANGER

Hazard Statements HIGHLY FLAMMABLE LIQUID AND VAPOR. HARMFUL IF SWALLOWED. CAUSES SKIN AND EYE IRRITATION. MAY CAUSE RESPIRATORY IRRITATION. MAY CAUSE DAMAGE TO ORGANS

Precautions Keep away from heat/sparks/open flame/hot surfaces and other ignition sources. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use only non-sparking tools. Use explosion-proof electrical equipment. Take precautionary measures against static discharge. Avoid breathing fumes and vapors. Wash thoroughly after handling. Use only outdoors or in a well ventilated area. Wear protective gloves and eye protection. **IF ON SKIN (or hair)** Remove immediately all contaminated clothing. Rinse skin with water. If skin irritation persists, get medical attention. **IF INHALED:** Remove victim to fresh air and keep at rest in a positions comfortable for breathing. Call a Poison Center or Physician if you feel unwell. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention. **IN CASE OF FIRE:** Use dry sand, dry chemical or alcohol resistant foam for extinction. Store in a well ventilated space. Keep cool. Store locked up. Dispose of contents/container according to applicable regulations.

Response **IF SWALLOWED:** Do not give anything by mouth is victim is unconscious. Rinse mouth and give victim 1 cup water to dilute product in stomach. Do NOT induce vomiting. If victim vomits naturally, lean victim forward to reduce risk of aspiration. Immediately call a POISON CENTER or doctor/physician. **IF ON SKIN (or hair):** Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs, get medical attention. Wash contaminated clothing before reuse. **IF INHALED:** remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor/physician.

Storage Store locked up. Dispose of contents/container to comply with applicable regulations.

Other hazards not otherwise classified:

None known

SECTION 3 – COMPOSITION/INFORMATIN ON HAZARDOUS INGREDIENTS

INGREDIENT NAME	CAS NUMBER	% BY VOLUME
Ethyl Alcohol	64-17-5	85.5
Methanol	67-56-1	13.7
Ethyl Acetate	141-78-6	0.85
Water	7732-18-5	balance

SECTION 4 – FIRST AID MEASURES**Eye Contact**

Immediately flush eyes with plenty of water for at least 15 minutes and keep eyelids apart and away from eyeballs during flushing process. Remove contact lenses if present and easy to do. Continue rinsing. Call a physician immediately.

Skin Contact

Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs, get medical attention. Wash contaminated clothing before reuse.

Inhalation

If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Ingestion

Do not give anything by mouth is victim is unconscious. Rinse mouth and give victim 1 cup water to dilute product in stomach. Do NOT induce vomiting. If victim vomits naturally, lean victim forward to reduce risk of aspiration. Immediately call a POISON CENTER or doctor/physician

Most important Symptoms and Effects

	Description
Eyes	Causes irritation to the eyes. Can cause painful sensitization to light. Can cause a form of chemical conjunctivitis and cause corneal damage.

Ingestion	Can cause gastrointestinal irritation with nausea, vomiting and diarrhea. Systemic toxicity and acidosis can occur. Advanced stages can lead to respiratory failure, kidney failure, coma and death.
Inhalation	Causes respiratory tract irritation. Can cause narcotic effects in high concentration. Vapors may cause dizziness or suffocation. Systemic toxicity and acidosis can occur. Advanced stages can lead to respiratory failure, kidney failure, coma and death.
Skin	Causes moderate skin irritation. Can cause dermatitis by de-fating the skin from prolonged or repeated contact.

SECTION 5 – FIRE FIGHTING MEASURES

Extinguishing Media Apply alcohol-type or all-purpose-type foams by manufacturers recommended techniques for large fires. Use carbon dioxide or dry chemical media for small fires. Water is generally unsuitable for large open pools of alcohol and may help to spread the fire. Use water spray to cool fire-exposed containers and structures. Use water spray to disperse vapors: re-ignition is possible. Use self-contained breathing apparatus and protective clothing.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions

Use personal protective equipment. Avoid breathing vapor, mist or gas. Remove ALL sources of heat, sparks and flame. Ensure adequate ventilation using non-electrical means such as opening of doors and windows. Evacuate personnel to safe areas upwind from spill. Ensure clean-up is conducted by trained personnel.

Environmental precautions

Prevent leakage or spillage if safe to do so. Do not let product enter drains. Dike spills wherever possible to prevent material from entering drains or waterways.

Methods and materials for containment and cleaning up

Contain spillage and then soak up using an inert absorbent material. Dispose of absorbent as hazardous waste in sealed containers to prevent the alcohol from evaporating and causing further fire risk.

SECTION 7 – HANDLING AND STORAGE

Precautions for safe handling.

Keep away from heat, sparks and flames. No smoking while handling this product. Use with adequate ventilation. Avoid contact with skin, eyes and do not inhale vapors. Wear protective equipment when handling. Take precautions to prevent static electricity build up when transferring product. Wash exposed skin after handling.

Conditions for safe storage

Keep container tightly closed in a dry and well ventilated place. Keep away from heat, sparks and flames. Containers which are opened must be resealed and kept upright to avoid leakage. Keep out of reach of children.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye Protection

Chemical goggles should be used when handling this product. Eye wash should be available in areas where this product is handled.

Skin Protection

Wear protective neoprene or butyl gloves. Where extensive exposure to the product is possible, use resistant coveralls, apron and boots to prevent contact.

Respiratory Protection

If airborne concentrations are above the permissible exposure limit, use NIOSH approved respirators.

Work Place Hygiene

Avoid contact with skin, eyes and clothing. After using this product workers should wash their hands and faces before eating, drinking or smoking. Clothes should be changed if contaminated with this product. Handle in accordance with good industrial hygiene and safety practice.

Engineering Controls

Use this product in areas of good ventilation that is non-sparking and explosion proof. .

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Color	Colorless
pH	Not applicable
Melting point	- 110 C
Boiling point	72 – 77.4 C
Flash point	12.5 closed cup ASTM D-56
Evaporation rate	1.8 (butyl acetate)
Lower flammability limit	3.3% V/V for Ethanol, 7.3% V/V for Methanol, 2.2% V/V for Ethyl acetate
Upper flammability limit	19 % V/V for Ethanol, 36% V/V for Methanol, 11.5% V/V Ethyl acetate

Vapor pressure	5.87 KPa
Vapor Density	1.53 (air = 1)
Density	0.789 at 20 C
Water solubility	Soluble
Partition coefficient	No data available
Auto ignition temperature	422 C
Decomposition temperature	No data available
Viscosity	1.35 cp @ 20 C
% Volatiles	100
CHEMICAL FORMULA	Ethanol: C ₂ H ₅ -OH Molecular weight: 46.07 Methanol: CH ₃ -OH Molecular weight: 32.04 Ethyl Acetate: CH ₃ -CO ₂ -C ₂ H ₅ Molecular weight: 88.1 Water: H ₂ O Molecular weight :18.02

SECTION 10 – STABILITY AND REACTIVITY

Reactivity	Stable
Conditions to avoid	Sources of ignition
Incompatible Materials	Avoid contact with oxidizing products

Hazardous decomposition products

Burning can produce carbon monoxide and/or carbon dioxide and/or formaldehyde.

SECTION 11 – TOXICOLOGICAL INFORMATION

INGREDIENT	% V/V	TLV, ppm	LC50, ppm/4h.	LD50, mg/kg	LD50, mg/kg
			RAT, INHAL.	RAT, ORAL	RABBIT, SKIN
Ethyl Alcohol	85.5	1000	31,623	7,060	20,000
Methanol	13.7	200	64,000	5,628	20,000

Ethyl Acetate	0.85	400	22,627	11,300	180,000
Water	Balance	NA	NA	NA	NA

References: ACGIH (1988-1989), RTECS (1983).

Likely Routes of exposure Skin and eye contact, ingestion, inhalation

Ingestion : May cause dizziness, faintness, drowsiness, decreased awareness and responsiveness, euphoria, abdominal discomfort, nausea, vomiting, staggering gait, lack of coordination and coma.

Skin Absorption: No adverse effects with normal skin. However potentially harmful amounts of material may be absorbed across markedly abraded skin when contact is sustained particularly in children.

Inhalation: High vapour concentrations may cause a burning sensation in the throat and nose, stinging and watering in eyes. At concentrations which cause irritation, dizziness, faintness, drowsiness, nausea and vomiting may occur.

Skin Contact: No evidence of adverse effects from available information.

Eye Contact: Severe eye irritant. Vapors can irritate eyes. Eye damage from contact with liquid is reversible and proper treatment will result in healing within a few days. Damage is usually mild to moderate conjunctivitis, seen mainly as redness of the conjunctiva.

Effects of Repeated Overexposure: Long term repeated oral exposure to ethanol may result in the development of progressive liver injury with fibrosis. Long term exposure to methanol has been associated with headaches, giddiness, conjunctivitis insomnia and impaired vision. Ethyl acetate is of relatively low toxicity. Repeated exposure to ethanol may exacerbate liver injury from other causes. Ethanol has been identified in studies as a developmental toxicant when consumed as a beverage during pregnancy.

SECTION 12 – ECOLOGICAL INFORMATION

Precautions

Keep away from ALL sources of ignition, drains and waterways.

	Ethanol	Methanol
CAS	64-17-5	67-56-1
LC50 / 96 hour	>10,000 ml/L trout	29,400 mg/L minnow
Biodegradation	Biodegradable	Biodegradable
Bioaccumulation	Unlikely	Unlikely

Mobility In soil	No data available	No data available

SECTION 13 – DISPOSAL CONSIDERATIONS

Keep away from ALL sources of ignition, drains and waterways. Contain spilled material. Provide adequate ventilation and protective equipment. Remove sources of heat, sparks or flames. Spill should be collected in suitable containers or absorbed on a suitable absorbent material for subsequent disposal.

Dispose of product in accordance with local, provincial and federal regulations. Check with local municipal authority to ensure compliance.

Containers should be empty and thoroughly rinsed before disposal.

SECTION 14 – TRANSPORT INFORMATION

Canadian TDG UN Number 1986
Shipping Name Alcohols NOS (Ethanol, Methanol, Ethyl acetate)
Transport Hazard Classes 3 (6.1)
Packing Group 11

Transport Document Description

Alcohols NOS (Ethanol, Methanol, Ethyl acetate) UN 1986 Class 3 (6.1) PG 11

SECTION 15 – REGULATORY INFORMATION

WHMIS 1988 Classification

CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).
CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC).
CLASS D-2A: Material causing other toxic effects (VERY TOXIC).
Class D-2B: Material causing other toxic effects (TOXIC).

This SDS prepared pursuant to Canadian WHMIS 2015 regulations (Controlled Products Regulations under the Hazardous Product Act).

Canadian Environmental Protection Act (CEPA) Information: All ingredients listed appear on Domestic Substances List (DSL)

SECTION 16 – OTHER INFORMATION

Prepared by Bebbington Industries

Date Preparation July 2023

DISCLAIMER

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL ONLY BE USED AS A GUIDE. BEBBINGTON INDUSTRIES SHALL NOT BE HELD LIABLE FOR ANY DAMAGE OR INJURY RESULTING FROM THE HANDLING OF, OR FROM CONTACT WITH THE ABOVE PRODUCT. ALL PERSONS USING THIE PRODUCT SHOULD B WHMIS TRAINED.

