

TDI ADHESIVE RELEASE



MATERIAL SAFETY DATA

Creating Better Solutions . . . Naturally

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200 (Standard must be consulted for specific requirements.)

Specially Denatured Alcohol (SDA) 40-B, 190 Proof

MSDS No.: SDA40B 190

Revision Date: December 8, 2010

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1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND THE COMPANY:

1.1 Identification of the Substance:

Product Name: Specially Denatured Alcohol (SDA) 40-B, 190 Proof
Chemical Name: Ethyl Alcohol (Alcohol, Denatured)
CAS Number: 64-17-5
Chemical Type: Mixture
Physical State: Liquid



1 Health
0 Reactivity
C Personal Protection

1.2 Use of the Substance:

Per the U.S. Alcohol and Tobacco Tax and Trade Bureau (TTB) (27 CFR 21.76): As a Solvent: Hair and scalp preparations; Bay rum; Lotions and creams (hand, face, and body); Deodorants (body); Perfumes and perfume tinctures; Toilet waters and colognes; Shampoos; Soaps and bath preparations; External pharmaceuticals (not USP or NF); Disinfectants, insecticides, fungicides, and other biocides; Cleaning solutions (including household detergents); Theater sprays, incense, and room deodorants.

1.3 Company Identification:

Manufacturer: MGP Ingredients, Inc.[®]
Address: Cray Business Plaza, 100 Commercial Street
City, State, Zip: Atchison, KS 66002, USA
Phone: (913) 367-1480

1.4 Emergency Telephone: 1-800-424-9300 (Chemtrec)

2. HAZARDOUS IDENTIFICATION:



+ F : Highly flammable



+ Xn : Harmful

R11 : Highly flammable

R20 : Harmful by inhalation

Hazard Category:

Acute

Chronic

Fire

Pressure

Reactive

Hazardous Identification Information:

POISON! DANGER! MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. VAPOR HARMFUL. FLAMMABLE! AFFECTS CENTRAL NERVOUS SYSTEM. CAUSES IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT. MAY AFFECT LIVER, BLOOD, AND REPRODUCTIVE SYSTEM.

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3. COMPOSITION/INFORMATION ON INGREDIENTS:

Ingredient Name	CAS #	EU Inventory #	% Wt	Classification
Ethanol (Ethyl Alcohol)	64-17-5	200-578-6	92.3	R11: Highly flammable S2: Keep out of reach of children S7: Keep container tightly closed S16: Keep away from sources of ignition – No smoking
tert-Butyl Alcohol	75-65-0	200-889-7	0.1	R11 : Highly flammable R20: Harmful by inhalation S2: Keep out of reach of children S9: Keep container in a well-ventilated place S16: Keep away from sources of ignition – No smoking
Denatonium Benzoate	3734-33-6	223-095-2	<0.1	This substance is not listed in the Annex 1 of Directive 67/548/EEC
Water	7732-18-5	231-791-2	7.6	This substance is not listed in the Annex 1 of Directive 67/548/EEC

4. FIRST AID MEASURES:

Route(s) of Entry:

Inhalation, Skin, Eye, Ingestion

Health Hazards (Acute and Chronic):

Inhalation: May cause irritation to the mucous membranes of the upper respiratory tract. Exposure over 1000 ppm may cause headache, drowsiness, lassitude, loss of appetite, inability to concentrate, throat irritation

Ingestion: Can cause depression of Central Nervous System, nausea, vomiting, diarrhea, intoxication, and in acute cases, death

Eye: Liquid and vapor may cause irritation. Splashes may cause temporary pain and blurred vision

Skin: May cause irritation, cracking, flaking, and defatting of skin on prolonged contact

Chronic Exposure: Prolonged skin contact causes drying and cracking of skin. May affect nervous system, liver, blood, reproductive system.

Signs and Symptoms:

Headache, drowsiness, lassitude, loss of appetite, inability to concentrate, irritation of throat/eye/skin, depression of central nervous system, nausea, vomiting, diarrhea, skin defatting.

Medical Conditions Generally Aggravated by Exposure:

People with pre-existing skin disorders, eye problems, or impaired kidney or liver function may be more susceptible to effects.

Emergency and First Aid Procedures:

Ingestion: Conscious or able to swallow--have victim drink water or milk to dilute. NEVER GIVE ANYTHING BY MOUTH IF UNCONSCIOUS OR CONVULSING. Call doctor or Poison Control immediately. Induce vomiting only if advised by doctor or Poison Control.

Inhalation: Immediately remove to fresh air. If victim has stopped breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention immediately.

Eye/Skin: Remove contaminated clothing. Immediately flush area with plenty of cool water. Eye should be flushed for at least 15 minutes. Get medical attention if irritation develops or persists.

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5. FIRE-FIGHTING MEASURES:

Flash Point: 55.0°F CC

Lower Explosive Limit: (Ethanol) 3.3%

Upper Explosive Limit: (Ethanol) 19.0%

Fire Extinguishing Media:

Use dry chem, "Alcohol" Foam, CO₂. Water may be ineffective but water should be used to keep fire-exposed container cool.

Special Fire Fighting Procedures:

If leak/spill hasn't ignited, use water spray to disperse vapors and protect people attempting to stop the leak. Water spray may be used to flush spills away from exposure and to dilute spills to non-flammable mixtures.

In the event of fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece in pressure demand or other positive pressure mode. Water can be used to extinguish flames and cool fire-exposed containers.

Unusual Fire and Explosion:

Above flash point, vapor-air mixtures are explosive. Vapors can flow along surfaces to ignition sources and flash back. Sealed containers may rupture when heated. Sensitive to static discharge.

6. ACCIDENTAL RELEASE MEASURES:

Steps to be Taken in Case Material is Released or Spilled:

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment. Isolate hazard area. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriated container or absorb with an inert material (vermiculite, dry sand, earth, etc.), and place in a chemical waste container. Do not use combustible materials, such as sawdust. Do not flush to sewer!

7. HANDLING AND STORAGE:

Precautions to be Taken:

Protect against physical damage. Store in a cool, dry, well-ventilated location. Keep away from heat, sparks, and flame. Avoid contact with eyes. Keep container closed. Use with adequate ventilation. Ground container when transferring.

Other Precautions:

Vapors may collect in containers. Treat empty containers as hazardous. Sudden release of hot organic chemical vapors/mists from process equipment operating at elevated temperatures may result in ignition with out the presence of obvious ignition sources.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

Ventilation Requirements:

Special, local ventilation is needed where vapors escape to workplace air.

Personal Protective Equipment:

Use self-contained breathing apparatus in high vapor concentration. **WARNING:** Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: impervious clothing including boots, gloves, lab coat, apron, or coveralls as appropriate

Eye Protection: safety glasses and/or full face shield where splashing is possible

Other Protective Equipment: eyewash, safety shower

Work Hygienic Practices: wash thoroughly after handling

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EXPOSURE GUIDELINES		OSHA		ACGIH	
COMPONENT	CAS #	PEL	STEL/C	TWA	STEL/C
Ethanol (Ethyl Alcohol)	64-17-5	1000 ppm	N.A.	1000 ppm	N.A.
tert-Butyl Alcohol	75-65-0	100 ppm 100 ppm*	Not Established 150 ppm*	100 ppm	Not Established
Denatonium Benzoate	3734-33-6	Not Established	Not Established.	Not Established	Not Established

* Vacated 1989 OSHA PEL(s).

9. PHYSICAL AND CHEMICAL PROPERTIES:

Boiling Point: (Ethanol) 173°F
 Melting/ Freezing Point: (Ethanol) -173°F
 Evaporation Rate: (Ethanol) 3.0
 Vapor Pressure (mm Hg.): 44.6 @ 68°F
 Vapor Density (AIR = 1): (Ethanol) 1.59
 Solubility in Water: Completely
 Appearance and Odor: Clear and Colorless
 Other Information: Specific Gravity @ 60°F: 0.8164 maximum

10. STABILITY AND REACTIVITY:

Stability: Stable under normal conditions

Incompatibility (Materials to Avoid): Strong oxidants, silver salts, acid chlorides, alkali metals, metal hydrides, hydrazine, and many other substances.

Decomposition/By Products: Carbon Dioxide, Carbon Monoxide

Hazardous Polymerization: None

11. TOXICOLOGICAL INFORMATION:

Ethanol:

Oral rat LD50: 7060 mg/kg; inhalation rat LC50: 20,000 ppm/10H;
 Irritation data, eye, rabbit: 50 mg/24H Severe;
 Investigated as a tumorigen, mutagen, reproductive effector.
Reproductive: Ethanol has been linked to birth defects in humans.
Carcinogenicity: ACGIH: A4 – not classifiable as a human carcinogen

tert-Butyl Alcohol:

Oral rat LD50: 3500 mg/kg; inhalation rat LC50: >10000 ppm/4H
Reproductive: tert-Butyl Alcohol may cause reproductive disorders.
Carcinogenicity: ACGIH: A4 – not classifiable as a human carcinogen

Denatonium Benzoate:

Oral rat LD50: 612 mg/kg
Reproductive: Not Available
Carcinogenicity: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA

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12. ECOLOGICAL INFORMATION:

Ethanol:

Soil: readily biodegrades, quickly evaporates, leaches into groundwater

Water: readily biodegrades, evaporates to moderate extent. Does not bioaccumulate

Air: readily degrades by reaction with photochemically produced hydroxyl radicals, readily removed by dry and wet deposition, has a half-life between one and 10 days

tert-Butyl Alcohol:

Not Available

Denatonium Benzoate:

Not Available

13. DISPOSAL CONSIDERATIONS:

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to an RCRA approved incinerator or disposed in an RCRA approved waste facility. Processing, use, or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations.

14. TRANSPORT INFORMATION:

Domestic (Land, D.O.T.)

Proper Shipping Name: Alcohols, nos.

Hazard Class: 3 (Flammable Liquid)

UN/NA: UN1987

Packing Group: II

Emergency Response Guide #127

International (Water, I.M.O.)

Proper Shipping Name: Alcohols, nos.

Hazard Class: 3.2 (Flammable Liquid)

UN/NA: UN1987

Packing Group: II

Emergency Response Guide #127



+ F : Highly flammable



+ Xn : Harmful

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15. REGULATORY INFORMATION:

All components of this product are on the following country inventories or are exempt from the inventory requirements:

Country	Inventory
Australia	Australian Inventory of Chemical Substances (AICS)
Canada	Canadian Domestic Substance List (DSL)
China	Inventory of Existing Chemical Substances (IECS)
European Union	European Inventory of Existing Commercial chemical Substances (EINECS)
Japan	Existing and New Chemical Substances (ENCS)
Korea	Existing Chemicals List (ECL)
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
United States	Toxic Substances Control Act (TSCA)

TSCA

CAS# 64-17-5 is listed on the TSCA inventory
 CAS# 75-65-0 is listed on the TSCA inventory
 CAS# 3784-33-6 is listed on the TSCA inventory
 Health & Safety Reporting List : None
 Chemical Test Rules: None
 Section 12b: None
 TSCA Significant New Use Rule: None

EPCRA

Section 302: None
 Section 304: None
 SARA Codes: CAS# 64-17-5: acute, chronic, flammable; CAS# 75-65-0: acute, flammable
 Section 313: CAS# 75-65-0 is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

CERCLA

Section 103: None

Clean Air Act

Hazardous Air Pollutants: None
 Class 1 Ozone Depletors: None
 Class 2 Ozone Depletors: None

Clean Water Act

Hazardous Substances: None
 Priority Pollutants: None
 Toxic Pollutants: None

California Proposition 65

This product contains chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm.

Export and Import of Dangerous Chemicals (Regulation (EEC) No 304/2003) Information:

This substance is not listed in the Annex I of Council Regulation No (EC) 304/2003.

European Priority Lists and Risk Assessment (Council Regulation (EEC) No 793/93) Information:

This substance is not listed in a priority list (as foreseen under Council Regulation (EEC) No 793/93 on the evaluation and control of the risks of existing substances.).

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16. OTHER INFORMATION:

Ethanol:

- R11: Highly flammable
- S2: Keep out of reach of children
- S7: Keep container tightly closed
- S16: Keep away from sources of ignition – No smoking

Tert-Butyl Alcohol:

- R11: Highly flammable
- R20: Harmful by inhalation
- S2: Keep out of reach of children
- S9: Keep container in a well-ventilated place
- S16: Keep away from sources of ignition – No smoking

Safety Data Sheet prepared according to Regulation (EC) No 1907/2006.

Product formula per the U.S. Alcohol and Tobacco Tax and Trade Bureau (TTB) (27 CFR 21.76)

The information presented above is believed to be accurate and represents the best information currently available to MGP Ingredients, Inc.® (MGPI). MGPI makes no warranty, express or implied, with respect to such information, and assumes no liability resulting from its use. In no way shall MGPI be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages even if MGPI has been advised of the possibility of such damages.