

COMPANY IDENTITY: Packaging Service Co., Inc.  
PRODUCT IDENTITY: CROWN INDUSTRIAL SERIES DENATURED ALCOHOL-THINNER  
SDS NUMBER: DNAL01

DATE: 01/05/10

## SAFETY DATA SHEET

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements and the International Chemical Safety Cards of the Global Harmonizing System.  
THIS SDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)  
IMPORTANT: Read this SDS before handling & disposing of this product.  
Pass this information on to employees, customers, & users of this product.

### SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY: CROWN INDUSTRIAL SERIES DENATURED ALCOHOL - THINNER  
NEW MSDS DATE: 01/05/2010  
COMPANY IDENTITY: Packaging Service Co., Inc.  
COMPANY ADDRESS: 1904 Mykawa Road / P O Box 875  
COMPANY CITY: Pearland, TX 77581  
COMPANY PHONE: 1-281-485-1458  
EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)  
CANUTEC: 1-613-996-6666 (CANADA)

### SECTION 2. HAZARDS IDENTIFICATION

#### DANGER!!

EXPOSURE PREVENTION: PREVENT DISPERSION OF MISTS OR DUST!  
AVOID EXPOSURE OF ADOLESCENTS, CHILDREN!

#### RISK STATEMENTS:

R36/37/38 Irritating to eyes, respiratory system and skin.  
R39/23/24/25 Toxic: Danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.  
R11 Highly Flammable.  
R20 Harmful by inhalation.  
R41 Risk of serious damage to eyes.  
R66 Repeated exposure may cause skin dryness or cracking.  
R67 Vapors may cause drowsiness and dizziness.

#### SAFETY STATEMENTS:

S7/9 Keep container tightly closed and in a well-ventilated place.  
S24/25 Avoid contact with skin and eyes.  
S16 Keep away from sources of ignition. No smoking.  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S29 Do not empty into drains.  
S45 In case of accident, or if you feel unwell, seek medical advice immediately. (Show the label where possible).

SEE SECTION 11 FOR OTHER TOXICOLOGICAL INFORMATION (ACUTE & CHRONIC HAZARDS)

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	CAS#	EINECS#	WT%	TWA (OSHA)	TLV (ACGIH)
Methanol	67-56-1	200-659-6	70-75	200 ppm S	200 ppm S
Ethanol	64-17-5	200-578-6	15-25	1000 ppm	1000 ppm A4
Isopropanol	67-63-0	200-661-7	0- 5	400 ppm	200 ppm A4
Methyl Isobutyl Ketone	108-10-1	203-550-1	0- 5	100 ppm	50 ppm

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### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS (CONTINUED)

MATERIAL	CAS#	EINECS#	CEILING	STEL(OSHA/ACGIH)	HAP
Methanol	67-56-1	200-659-6	None Known	250 ppm	Yes
Isopropanol	67-63-0	200-661-7	None Known	400 ppm	No
Methyl Isobutyl Ketone	108-10-1	203-550-1	None Known	75 ppm	Yes

Each component showing 'Yes' under "HAP" is an EPA Hazardous Air Pollutant.

### SECTION 4. FIRST AID MEASURES

#### EYE CONTACT:

For eyes, flush with plenty of water for 15 minutes & get medical attention.

#### SKIN CONTACT:

In case of contact with skin immediately remove contaminated clothing.  
Wash thoroughly with soap & water. Wash contaminated clothing before reuse.

#### INHALATION:

After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR).

#### SWALLOWING:

Induce vomiting. GET MEDICAL ATTENTION IMMEDIATELY.  
If no medical personnel are available & patient is conscious, ingestion of an alcoholic beverage may prevent blindness, death.  
Do NOT induce vomiting to an unconscious or convulsing person.

### SECTION 5. FIRE FIGHTING MEASURES

#### FIRE & EXPLOSION PREVENTIVE MEASURES

NO open flames, NO sparks, & NO smoking. NO contact with oxidants.  
Above flash point, use a closed system, ventilation, explosion-proof electrical equipment, lighting.  
Do NOT use compressed air for filling, discharging, or handling.

#### EXTINGUISHING MEDIA

Use dry powder, AFFF, alcohol-resistant foam, water in large amounts, carbon dioxide.

#### SPECIAL FIRE FIGHTING PROCEDURES

Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used.  
Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots).  
Use NIOSH approved positive-pressure self-contained breathing apparatus.

#### UNUSUAL EXPLOSION AND FIRE PROCEDURES

HIGHLY FLAMMABLE!! VAPORS CAN CAUSE FLASH FIRE  
Isolate from oxidizers, heat, sparks, electric equipment & open flame.  
Closed containers may explode if exposed to extreme heat.  
Applying to hot surfaces requires special precautions.  
Empty container very hazardous! Continue all label precautions!

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

### PERSONAL PROTECTIVE MEASURES:

EVACUATE DANGER AREA! Consult an expert!  
Vapors may ignite explosively & spread long distances. Prevent vapor buildup.  
Keep unprotected personnel away. Ventilate spill area. Remove all ignition sources.  
Use complete chemical protective suit with self-contained breathing apparatus.

### ENVIRONMENTAL PRECAUTIONS:

Keep from entering storm sewers and ditches which lead to waterways.

### CONTAINMENT AND CLEAN-UP MEASURES:

Stop spill at source. Dike and contain. Collect leaking liquid in sealable containers.  
Absorb remaining liquid in sand or inert absorbent. Remove to safe place.

## SECTION 7. HANDLING AND STORAGE

### HANDLING

Isolate from oxidizers, heat, sparks, electric equipment & open flame.  
Use only with adequate ventilation. Avoid breathing of vapor or spray mist.  
Avoid contact with skin & eyes.  
Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.  
Avoid free fall of liquid. Ground containers when transferring. Do not flame cut, saw, drill, braze, or weld. Empty container very hazardous! Continue all label precautions!  
To minimize static discharge when transferring, ensure electrical continuity by bonding and grounding all equipment. Use an inlet line diameter of at least 3.5 inches (8.9 centimeters) with a maximum flow rate of 1 meter/second.

### STORAGE

Keep in fireproof surroundings. Keep separated from strong oxidants, food & feedstuffs. Keep cool.  
Do not store above 49 C/120 F. Keep container tightly closed & upright when not in use to prevent leakage.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### RESPIRATORY EXPOSURE CONTROLS

A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

### VENTILATION

LOCAL EXHAUST:	Necessary	MECHANICAL (GENERAL):	Acceptable
SPECIAL:	None	OTHER:	None

Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

### PERSONAL PROTECTIONS:

Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONTINUED)

### WORK & HYGIENIC PRACTICES:

Provide readily accessible eye wash stations & safety showers.  
Wash at end of each workshift & before eating, smoking or using the toilet.  
Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

## SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE:	Liquid, Water-White
ODOR:	Ketone
ODOR THRESHOLD:	Not Available
pH (Neutrality):	Not Applicable
MELTING POINT/FREEZING POINT:	Not Available
BOILING RANGE (IBP,50%,Dry Point):	63 66 83 C / 147 152 182 F
FLASH POINT (TEST METHOD):	4 C / 40 F (TCC)
EVAPORATION RATE (n-BUTYL ACETATE=1):	1.7
FLAMMABILITY CLASSIFICATION:	Class I B
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	6.5
UPPER FLAMMABLE LIMIT IN AIR (% by vol):	Not Available
VAPOR PRESSURE (mm of Hg)@20 C	87.1
VAPOR DENSITY (air=1):	1.2
GRAVITY @ 68/68 F / 20/20 C:	
SPECIFIC GRAVITY (Water=1):	0.793
POUNDS/GALLON:	6.603
WATER SOLUBILITY:	Complete
PARTITION COEFFICIENT (n-Octane/Water):	Not Available
AUTO IGNITION TEMPERATURE:	398 C / 750 F
DECOMPOSITION TEMPERATURE:	Not Available
REFRACTIVE INDEX:	1.337
VOC'S (>0.44 Lbs/Sq In) :	100.0 Vol% / 792.7 g/L / 6.6 Lbs/Gal
TOTAL VOC'S (TVOC):	100.0 Vol% / 792.7 g/L / 6.6 Lbs/Gal
NONEXEMPT VOC'S (CVOC):	100.0 Vol% / 792.7 g/L / 6.6 Lbs/Gal
HAZARDOUS AIR POLLUTANTS (HAPS):	75.7 Wt% / 600.5 g/L / 5.0 Lbs/Gal
NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C)	87.1

## SECTION 10. STABILITY & REACTIVITY

### STABILITY

Stable under normal conditions.

### CONDITIONS TO AVOID

Isolate from oxidizers, heat, sparks, electric equipment & open flame.

### MATERIALS TO AVOID

The substance can presumably form explosive peroxides, under the influence of light and air, Check for peroxide prior to distillation, eliminate if found. Reacts violently with strong oxidants, strong reducing agents, causing fire & explosion hazard. Attacks

### HAZARDOUS DECOMPOSITION PRODUCTS

Carbon Monoxide, Carbon Dioxide from burning.

### HAZARDOUS POLYMERIZATION

Will not occur.

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## SECTION 11. TOXICOLOGICAL INFORMATION

### ACUTE HAZARDS

#### EYE & SKIN CONTACT:

Primary irritation to skin, defatting, dermatitis.  
Primary irritation to eyes, redness, tearing, blurred vision.  
Liquid can cause eye irritation. Wash thoroughly after handling.

#### INHALATION:

Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression. Vapor harmful. Breathing vapor can cause irritation. Acute overexposure can cause harm to kidneys, blood, nerves, liver, lungs. Repeated exposure over TLV can cause blindness.

#### SWALLOWING:

Can be fatal or cause blindness if swallowed. Cannot be made non-poisonous. POISON ! Can cause irreversible nervous system damage & death. Harmful or fatal if swallowed. Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea.

### SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

#### CONDITIONS AGGRAVATED

Chronic overexposure can cause harm to kidneys, blood, nerves, liver, lungs. Persons with severe skin, liver or kidney problems should avoid use.

### CHRONIC HAZARDS

#### CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:

This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%. Absorption thru skin may be harmful. Studies with laboratory animals indicate this product can cause damage to fetus. Depending on degree of exposure, periodic medical examination is indicated.

### MAMMALIAN TOXICITY INFORMATION

MATERIAL	CAS#	EINECS#	LOWEST KNOWN LETHAL DOSE DATA
Methanol	67-56-1	200-659-6	LOWEST KNOWN LD50 (ORAL) 1000.0 mg/kg(Man)
Isopropanol	67-63-0	200-661-7	LOWEST KNOWN LC50 (VAPORS) 1600 ppm (Rats)
Isopropanol	67-63-0	200-661-7	LOWEST KNOWN LD50 (SKIN) 16400.0 mg/kg (Rabbits)

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## SECTION 12. ECOLOGICAL INFORMATION

### AQUATIC ANIMAL INFORMATION:

The most sensitive known aquatic group to any component of this product is:  
Chub 250 ppm or mg/L (24 hour exposure).  
Keep out of sewers and natural water supplies.

### MOBILITY IN SOIL

This material is a mobile liquid.

### DEGRADABILITY

This product is partially biodegradable.

### ACCUMULATION

This product does not accumulate or biomagnify in the environment.

## SECTION 13. DISPOSAL CONSIDERATIONS

Processing, use or contamination may change the waste management options.  
Recycle / dispose of observing national, regional, state, provincial and local  
health, safety & pollution laws. If in doubt, contact appropriate agencies.

## SECTION 14. TRANSPORT INFORMATION

DOT SHIPPING NAME: NA1987, Denatured Alcohol, 3, PG-II  
DRUM LABEL: (FLAMMABLE LIQUID)  
IATA / ICAO: UN1986, Alcohols, flammable, toxic, n.o.s.  
(Contains: Methanol, Ethanol, Methyl Isobutyl Ketone), 3, (6.1), PG-II  
IMO / IMDG: UN1986, Alcohols, flammable, toxic, n.o.s.  
(Contains: Methanol, Ethanol, Methyl Isobutyl Ketone), 3, (6.1), PG-II  
EMERGENCY RESPONSE GUIDEBOOK NUMBER: 131

## SECTION 15. REGULATORY INFORMATION

### EPA REGULATION:

SARA SECTION 311/312 HAZARDS: Acute Health, Fire

All components of this product are on the TSCA list.

SARA Title III Section 313 Supplier Notification

This product contains the indicated <\*> toxic chemicals subject to the  
reporting requirements of Section 313 of the Emergency Planning & Community  
Right-To-Know Act of 1986 & of 40 CFR 372. This information must be  
included in all MSDSs that are copied and distributed for this material.

SARA TITLE III INGREDIENTS	CAS#	EINECS#	WT%	(REG.SECTION)	RQ(LBS)
*Methanol	67-56-1	200-659-6	70-75	(311,312,313,RCRA)	5000
*Methyl Isobutyl Ketone	108-10-1	203-550-1	0- 5	(311,312,313,RCRA)	5000

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#### SECTION 15. REGULATORY INFORMATION (CONTINUED)

> 6672 LB / 3032 KG OF THIS PRODUCT IN 1 CONTAINER EXCEEDS THE "RQ" OF METHANOL. Any release equal to or exceeding the RQ must be reported to the National Response Center (800-424-8802) and appropriate state and local regulatory agencies as described in 40 CFR 302.6 and 40 CFR 355.40 respectively. Failure to report may result in substantial civil and criminal penalties. State & local regulations may be more restrictive than federal regulations.

#### STATE REGULATIONS:

THIS PRODUCT MEETS REQUIREMENTS OF SOUTHERN CALIFORNIA AQMD RULE 443.1 & SIMILAR REGULATIONS

CALIFORNIA PROPOSITION 65: This product contains no chemicals known to the State of California to cause cancer & reproductive toxicity.

#### INTERNATIONAL REGULATIONS

The components of this product are listed on the chemical inventories of the following countries:  
Australia, Canada, China, Europe (EINECS), Japan, Korea, United Kingdom.

#### CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

B2: Flammable Liquid.  
D2B: Irritating to skin / eyes.

#### SECTION 16. OTHER INFORMATION

#### HAZARD RATINGS:

HEALTH (NFPA): 1, HEALTH (HMIS): 3, FLAMMABILITY: 3, REACTIVITY: 0  
(Personal Protection Rating to be supplied by user based on use conditions.)  
This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

#### EMPLOYEE TRAINING

See Section 2 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

#### NOTICE

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

Unless updated, the Safety Data Sheet is valid until 01/05/2013.