

COMPANY IDENTITY: Transchemical  
 PRODUCT IDENTITY: GOV - ETHANOL SDA 3A, 190

SDS DATE: 11/11/2014  
 ORIGINAL: 11/11/2014

## SAFETY DATA SHEET

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements 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: GOV - ETHANOL SDA 3A, 190  
 PRODUCT USES: Solvent

COMPANY IDENTITY: Transchemical  
 COMPANY ADDRESS: 419 E Desoto  
 COMPANY CITY: St. Louis, MO 63147  
 COMPANY PHONE: 1-314-231-6905  
 EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)  
 CANUTEC: 1-613-996-6666 (CANADA)

### SECTION 2. HAZARDS IDENTIFICATION

**DANGER!!**



#### 2.1 HAZARD STATEMENTS: (CAT = Hazard Category)

- (H200s) PHYSICAL: Flammable Liquids(CAT:2)  
**H225 HIGHLY FLAMMABLE LIQUID AND VAPOR.**
- (H300s) HEALTH: Acute Toxicity, Oral(CAT:3)  
**H301 TOXIC IF SWALLOWED.**
- (H300s) HEALTH: Acute Toxicity, Dermal(CAT:3)  
**H311 TOXIC IN CONTACT WITH SKIN.**
- (H300s) HEALTH: Skin Corrosion/Irritation(CAT:2)  
**H315 CAUSES SKIN IRRITATION.**
- (H300s) HEALTH: Serious Eye Damage/Eye Irritation(CAT:1)  
**H318 CAUSES SERIOUS EYE DAMAGE.**
- (H300s) HEALTH: Acute Toxicity, Inhalation(CAT:3)  
**H331 TOXIC IF INHALED.**
- (H300s) HEALTH: Target Organ Toxicity, Single Exposure(CAT:3)  
**H335 MAY CAUSE RESPIRATORY IRRITATION.**
- H336 MAY CAUSE DROWSINESS OR DIZZINESS.**
- (H300s) HEALTH: Target Organ Toxicity, Single Exposure(CAT:1)  
**H370 CAUSES DAMAGE TO ORGANS.**

#### 2.2 PRECAUTIONARY STATEMENTS:

**EXPOSURE PREVENTION: PREVENT DISPERSION OF MISTS OR DUST!**

**AVOID EXPOSURE OF ADOLESCENTS, CHILDREN!**

**P100s = General, P200s = Prevention, P300s = Response, P400s = Storage, P500s = Disposal**

- P210 Keep away from heat/sparks/open flames/hot surfaces -- No Smoking.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P264 Wash with soap & water thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P302+350 IF ON SKIN: Gently wash with soap & water.
- P304+340 IF INHALED: Remove victim to fresh air & keep at rest in a position comfortable for breathing.
- P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present & easy to do - Continue rinsing.
- P307+311 If exposed: Call a POISON CENTER or doctor/physician.
- P330 Rinse mouth.
- P332+313 If skin irritation occurs: Get medical advice/attention.
- P361 Remove/Take off immediately all contaminated clothing.
- P363 Wash contaminated clothing before reuse.
- P403+233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.
- P501 Dispose of contents/container to an approved waste disposal plant.

**SEE SECTIONS 8, 11 & 12 FOR TOXICOLOGICAL INFORMATION.**

COMPANY IDENTITY: Transchemical  
 PRODUCT IDENTITY: GOV - ETHANOL SDA 3A, 190

SDS DATE: 11/11/2014  
 ORIGINAL: 11/11/2014

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	CAS#	EINECS#	WT %
Ethanol	64-17-5	200-578-6	90-100
Methanol	67-56-1	200-659-6	0- 5

TRACE COMPONENTS: Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, reproductive toxins, respiratory tract mutagens, and sensitizers). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).

### SECTION 4. FIRST AID MEASURES

#### 4.1 MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE & CHRONIC:

See Section 11 for symptoms/effects, acute & chronic.

#### 4.2 GENERAL ADVICE:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists, refer to Section 8 for specific personal protective equipment.

#### 4.3 EYE CONTACT:

If this product enters the eyes, check for and remove any contact lenses. Open eyes while under gently running water. Use sufficient force to open eyelids. "Roll" eyes to expose more surface. Minimum flushing is for 15 minutes. Seek immediate medical attention.

#### 4.4 SKIN CONTACT:

If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.

#### 4.5 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). Seek immediate medical attention.

#### 4.6 SWALLOWING:

Do not induce vomiting. GET MEDICAL ATTENTION IMMEDIATELY. If person is fully conscious give 1 cup or 8 ounces of water. If medical advice is delayed and if an adult has swallowed several ounces of chemical, then give 3-4 ounces (1/3-1/2 cup) (90-120 ml) of hard liquor such as 80 proof whiskey. For children, give proportionally less liquor at a dose of 0.3 ounce (1 1/2 tsp) (8 ml) liquor for each 10 pounds of body weight, or 2 ml per kg body weight (for example: 1.2 ounce (2 1/3 tablespoon) for a 40 pound child or 36 ml for an 18 kg child).

#### 4.7 RESCUERS: Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take a copy of label and SDS to physician or health professional with victim.

#### 4.8 NOTES TO PHYSICIAN:

In cases where several ounces (60 - 100 ml) have been ingested, consider the use of ethanol and hemodialysis in the treatment. Consult standard literature for details of treatment. If ethanol is used, a therapeutically effective blood concentration in the range of 100 - 150 mg/dl may be achieved by a rapid loading dose followed by a continuous intravenous infusion. Consult standard literature for details of treatment. 4-Methyl pyrazole (Antizol TM) is an effective blocker of alcohol dehydrogenase and should be used in the treatment of ethylene glycol, di- or triethylene glycol, ethylene glycol butyl ether, or methanol intoxication if available. Fomepizol protocol (Brent, J. et al, New England Journal of Medicine, Feb 8, 1901, 344:6, p. 424-9): loading dose 15 mg/kg intravenously, follow by bolus dose of 10 mg/kg every 12 hours; after 48 hours, increase bolus dose to 15 mg/kg every 12 hours. Continue fomepizol until serum methanol, EG, DEG, or TEG are undetectable. The signs and symptoms of poisoning include anion gap metabolic acidosis, CNS depression, renal tubular injury, and possible late stage cranial nerve involvement. Respiratory symptoms, including pulmonary edema, may be delayed.

COMPANY IDENTITY: Transchemical  
 PRODUCT IDENTITY: GOV - ETHANOL SDA 3A, 190

SDS DATE: 11/11/2014  
 ORIGINAL: 11/11/2014

#### SECTION 4. FIRST AID MEASURES (CONTINUED)

Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. Maintain adequate ventilation and oxygenation of the patient. In severe poisoning, respiratory support with mechanical ventilation and positive end expiratory pressure may be required. Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighted against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

#### SECTION 5. FIRE FIGHTING MEASURES

##### 5.1 FIRE & EXPLOSION PREVENTIVE MEASURES:

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

##### 5.2 SUITABLE (& UNSUITABLE) EXTINGUISHING MEDIA:

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

##### 5.3 SPECIAL PROTECTIVE EQUIPMENT & PRECAUTIONS FOR FIRE FIGHTERS:

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).

##### 5.4 SPECIFIC HAZARDS OF CHEMICAL & HAZARDOUS COMBUSTION PRODUCTS:

**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!

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

##### 6.1 SPILL AND LEAK RESPONSE AND ENVIRONMENTAL PRECAUTIONS:

Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. No action shall be taken involving personal risk without suitable training. Keep unnecessary and unprotected personnel from entering spill area. Do not touch or walk through material. Avoid breathing vapor or mist. Provide adequate ventilation. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond with trained personnel. ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area).

##### 6.2 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, EMERGENCY PROCEDURES:

The proper personal protective equipment for incidental releases (such as: 1 Liter of the product released in a well-ventilated area), use impermeable gloves, they should be Level B: **triple-gloves (rubber gloves and nitrile gloves over latex gloves), chemical resistant suit and boots, hard-hat, and Self-Contained Breathing Apparatus** specific for the material handled, goggles, face shield, and appropriate body protection. In the event of a large release, use impermeable gloves, specific for the material handled, chemically resistant suit and boots, and hard hat, and Self-Contained Breathing Apparatus or respirator. Personal protective equipment are required wherever engineering controls are not adequate or conditions for potential exposure exist. Select NIOSH/MSHA approved based on actual or potential airborne concentrations in accordance with latest OSHA and/or ANSI recommendations.

##### 6.3 ENVIRONMENTAL PRECAUTIONS:

Stop spill at source. Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Close or cap valves and/or block or plug hole in leaking container and transfer to another container. Keep from entering storm sewers and ditches which lead to waterways, and if necessary, call the local fire or police department for immediate emergency assistance.

##### 6.4 METHODS AND MATERIAL FOR CONTAINMENT & CLEAN-UP:

Absorb spilled liquid with polypads or other suitable absorbent materials. If necessary, neutralize using suitable buffering material, (acid with soda ash or base with phosphoric acid), and test area with litmus paper to confirm neutralization. Clean up with non-combustible absorbent (such as: sand, soil, and so on). Shovel up and place all spill residue in suitable containers. Dispose of at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal (see Section 13 - Disposal Considerations).

COMPANY IDENTITY: Transchemical  
 PRODUCT IDENTITY: GOV - ETHANOL SDA 3A, 190

SDS DATE: 11/11/2014  
 ORIGINAL: 11/11/2014

## SECTION 7. HANDLING AND STORAGE

### 7.1 PRECAUTIONS FOR SAFE 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. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to 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!

### 7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

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

### 8.1 EXPOSURE LIMITS:

MATERIAL	CAS#	EINECS#	TWA (OSHA)	TLV (ACGIH)
Ethanol	64-17-5	200-578-6	1000 ppm	1000 ppm A4
Methanol	67-56-1	200-659-6	200 ppm S	200 ppm S

MATERIAL	CAS#	EINECS#	CEILING STEL (OSHA/ACGIH)	HAP
Methanol	67-56-1	200-659-6	None Known 250 ppm	Yes

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

### 8.2 APPROPRIATE ENGINEERING CONTROLS:

#### RESPIRATORY EXPOSURE CONTROLS

Airborne concentrations should be kept to lowest levels possible. If vapor, dust or mist is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air-supplied respirator authorized in 29 CFR 1910.134, European Standard EN 149, or applicable State regulations, after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown. Maintain airborne contaminant concentrations below exposure limits. If adequate ventilation is not available or there is potential for airborne exposure above the exposure limits, a respirator may be worn up to the respirator exposure limitations, check with respirator equipment manufacturer's recommendations/limitations. For particulates, a particulate respirator (NIOSH Type N95 or better filters) may be worn. If oil particles (such as: lubricants, cutting fluids, glycerin, and so on) are present, use a NIOSH Type R or P filter. For a higher level of protection, use positive pressure supplied air respiration protection or Self-Contained Breathing Apparatus or if oxygen levels are below 19.5% or are unknown.

#### EMERGENCY OR PLANNED ENTRY INTO UNKNOWN CONCENTRATIONS OR IDLH CONDITIONS

Positive pressure, full-face piece Self-Contained Breathing Apparatus; or positive pressure, full-face piece Self-Contained Breathing Apparatus with an auxiliary positive pressure Self-Contained Breathing Apparatus.

#### VENTILATION

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

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

### 8.3 INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

#### EYE PROTECTION:

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, chemical splash goggles should be worn, when a higher degree of protection is necessary, use splash goggles or safety glasses. Face-shields are recommended when the operation can generate splashes, sprays or mists.

COMPANY IDENTITY: Transchemical  
 PRODUCT IDENTITY: GOV - ETHANOL SDA 3A, 190

SDS DATE: 11/11/2014  
 ORIGINAL: 11/11/2014

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

#### HAND PROTECTION:

Use gloves chemically resistant to this material. Glove must be inspected prior to use. Preferred examples: Butyl rubber, Chlorinated Polyethylene, Polyethylene, Ethyl vinyl alcohol laminate ("EVAL"), Polyvinyl alcohol ("PVA"). Examples of acceptable glove barrier materials include: Natural rubber ("latex"), Neoprene, Nitrile/butadiene rubber ("nitrile") or ("NBR"), Polyvinyl chloride ("PVC") or "vinyl"), Viton. Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good practices. Wash and dry hands.

#### BODY PROTECTION:

Use body protection appropriate for task. Cover-all, rubber aprons, or chemical protective clothing made from impervious materials are generally acceptable, depending on the task.

#### WORK & HYGIENIC PRACTICES:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using toilet facilities and at the end of the working period. Provide readily accessible eye wash stations & safety showers. Remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

### SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE:	Liquid, Water-White
ODOR:	Alcohol
ODOR THRESHOLD:	Not Available
pH (Neutrality):	Not Available
MELTING POINT/FREEZING POINT:	Not Available
BOILING RANGE (IBP,50%,Dry Point):	63 77 100 C / 147 171 212 F
FLASH POINT (TEST METHOD):	4 C / 40 F (TCC) (Lowest Component)
EVAPORATION RATE (n-Butyl Acetate=1):	1.0
FLAMMABILITY CLASSIFICATION:	Class I B
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	4.3 (Lowest Component)
UPPER FLAMMABLE LIMIT IN AIR (% by vol):	Not Available
VAPOR PRESSURE (mm of Hg)@20 C	42.9
VAPOR DENSITY (air=1):	1.4
GRAVITY @ 68/68 F / 20/20 C:	
DENSITY:	0.806
SPECIFIC GRAVITY (Water=1):	0.807
POUNDS/GALLON:	6.720
WATER SOLUBILITY:	Complete
PARTITION COEFFICIENT (n-Octane/Water):	Not Available
AUTO IGNITION TEMPERATURE:	422 C / 793 F
DECOMPOSITION TEMPERATURE:	Not Available
REFRACTIVE INDEX:	1.360
VOCs (>0.044 Lbs/Sq In) :	92.8 Vol% / 748.7 g/L / 6.2 Lbs/Gal
TOTAL VOC'S (TVOC)*:	94.2 Vol% / 748.7 g/L / 6.2 Lbs/Gal
NONEXEMPT VOC'S (CVOC)*:	94.2 Vol% / 748.7 g/L / 6.2 Lbs/Gal
HAZARDOUS AIR POLLUTANTS (HAPS):	4.8 Wt% / 38.7 g/L / .3 Lbs/Gal
NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C)	0.0
VISCOSITY @ 20 C (ASTM D445):	Not Available

\* Using CARB (California Air Resources Board Rules).

COMPANY IDENTITY: Transchemical  
PRODUCT IDENTITY: GOV - ETHANOL SDA 3A, 190

SDS DATE: 11/11/2014  
ORIGINAL: 11/11/2014

### SECTION 10. STABILITY & REACTIVITY

#### 10.1 REACTIVITY & CHEMICAL STABILITY:

Stable under normal conditions, no hazardous reactions when kept from incompatibles.

#### 10.2 POSSIBILITY OF HAZARDOUS REACTIONS & CONDITIONS TO AVOID:

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

#### 10.3 INCOMPATIBLE MATERIALS:

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.

#### 10.4 HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide, Carbon Dioxide from burning.

#### 10.5 HAZARDOUS POLYMERIZATION:

Will not occur.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### 11.1 ACUTE HAZARDS

##### 11.11 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.

##### 11.12 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 affected organs by routes of entry. Repeated exposure over TLV can cause blindness.

##### 11.13 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.

#### 11.2 SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

##### MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Pre-existing disorders of any target organs mentioned in this Document can be aggravated by over-exposure by routes of entry to components of this product. Persons with these disorders should avoid use of this product.

#### 11.3 CHRONIC HAZARDS

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

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.

11.32 TARGET ORGANS: May cause damage to target organs, based on animal data.

11.33 IRRITANCY: Irritating to contaminated tissue.

11.34 SENSITIZATION: No component is known as a sensitizer.

11.35 MUTAGENICITY: No known reports of mutagenic effects in humans.

11.36 EMBRYOTOXICITY: No known reports of embryotoxic effects in humans.

11.37 TERATOGENICITY: No known reports of teratogenic effects in humans.

11.38 REPRODUCTIVE TOXICITY: No known reports of reproductive effects in humans.

COMPANY IDENTITY: Transchemical  
 PRODUCT IDENTITY: GOV - ETHANOL SDA 3A, 190

SDS DATE: 11/11/2014  
 ORIGINAL: 11/11/2014

### SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

A MUTAGEN is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate across generational lines. An EMBRYOTOXIN is a chemical which causes damage to a developing embryo (such as: within the first 8 weeks of pregnancy in humans), but the damage does not propagate across generational lines. A TERATOGEN is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A REPRODUCTIVE TOXIN is any substance which interferes in any way with the reproductive process.

#### 11.4 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)
Ethanol (Denatured)	64-17-5	200-578-6	LOWEST KNOWN LC50 (VAPORS) 2000 ppm (Rats)
Methanol	67-56-1	200-659-6	LOWEST KNOWN LD50 (SKIN) 20000.0 mg/kg (Rabbits)

### SECTION 12. ECOLOGICAL INFORMATION

#### 12.1 ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

#### 12.2 EFFECT OF MATERIAL ON PLANTS AND ANIMALS:

This product may be harmful or fatal to plant and animal life if released into the environment. Refer to Section 11 (Toxicological Information) for further data on the effects of this product's components on test animals.

#### 12.3 EFFECT OF MATERIAL ON AQUATIC LIFE:

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

#### 12.4 MOBILITY IN SOIL

This material is a mobile liquid.

#### 12.5 DEGRADABILITY

This product is completely biodegradable.

#### 12.6 ACCUMULATION

This product does not accumulate or biomagnify in the environment.

### SECTION 13. DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers and liners may retain some product residues. Vapor from some product residues may create a highly flammable or explosive atmosphere inside the container. **DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE USED CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY BURST AND CAUSE INJURY OR DEATH.** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Processing, use or contamination may change the waste disposal requirements. Do not dispose of on land, in surface waters, or in storm drains. Waste should be recycled or disposed of in accordance with regulations. Large amounts should be collected for reuse or consigned to licensed hazardous waste haulers for disposal. **ALL DISPOSAL MUST BE IN ACCORDANCE WITH ALL FEDERAL, STATE, PROVINCIAL, AND LOCAL REGULATIONS. IF IN DOUBT, CONTACT PROPER AGENCIES. EPA CHARACTERISTIC: D001**

COMPANY IDENTITY: Transchemical  
 PRODUCT IDENTITY: GOV - ETHANOL SDA 3A, 190

SDS DATE: 11/11/2014  
 ORIGINAL: 11/11/2014

#### SECTION 14. TRANSPORT INFORMATION

MARINE POLLUTANT: No  
 DOT/TDG SHIP NAME: UN1987, Alcohols, n.o.s., 3, PG-II  
 DRUM LABEL: (FLAMMABLE LIQUID)  
 IATA / ICAO: UN1986, Alcohols, toxic, n.o.s.  
 (contains: Ethanol, Methanol), 3, (6.1), PG-II  
 IMO / IMDG: UN1986, Alcohols, toxic, n.o.s.  
 (contains: Ethanol, Methanol), 3, (6.1), PG-II  
 EMERGENCY RESPONSE GUIDEBOOK NUMBER: 131



#### SECTION 15. REGULATORY INFORMATION

##### 15.1 EPA REGULATION:

**SARA SECTION 311/312 HAZARDS: Acute Health, Chronic 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	5-15	(311,312,313,RCRA)	5000

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.

##### 15.2 STATE REGULATIONS:

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

CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT (PROPOSITION 65):

This product contains the following chemical known to the State of California to cause reproductive toxicity: Methanol

##### 15.3 INTERNATIONAL REGULATIONS

The identified components of this product are listed on the chemical inventories of the following countries:

Australia (AICS), Canada (DSL or NDSL), China (IECSC), Europe (EINECS, ELINCS), Japan (METI/CSCL, MHLW/ISHL), South Korea (KECI), New Zealand (NZIoC), Philippines (PICCS), Switzerland (SWISS), Taiwan (NECSI), USA (TSCA).

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

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

This product was classified using the hazard criteria of the Controlled Products Regulations (CPR). This Document contains all information required by the CPR.

#### SECTION 16. OTHER INFORMATION

##### 16.1 HAZARD RATINGS:

HEALTH (NFPA): 1, HEALTH (HMIS): 3, FLAMMABILITY: 3, PHYSICAL HAZARD: 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.

##### 16.2 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.

##### 16.3 SDS DATE: 11/11/2014



COMPANY IDENTITY: Transchemical  
PRODUCT IDENTITY: GOV - ETHANOL SDA 3A, 190

SDS DATE: 11/11/2014  
ORIGINAL: 11/11/2014

**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 11/11/2017.