

AMERICAN AGIP COMPANY, INC.

AGIP Lubricants - USA

539 Marwood Road, Cabot, PA 16023

Phone: 724-352-4451

Fax: 724-352-9543

MATERIAL SAFETY DATA SHEET

SECTION I - SUPPLIER INFORMATION

Product Name:
Product Number:
Bulk Stock Number:

Windshield Washer Concentrate

Synonyms:

Methanol, Methyl Alcohol, Wood Alcohol, Columbian
Spirits, Carbinol

Chemical Formula:

CH₃OH - Mixture of water, Methanol, and dye ("The
Solution")

CAS Name & Number:

Methanol (67-56-1)

Chemical Family:

Aliphatic Alcohol

Supplier's Name & Address:

AMERICAN AGIP COMPANY, INC.
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539 Marwood Road, Cabot, PA 16023
Phone: 724-352-4451 Fax: 724-352-9543

Emergency Phone Number:

Chem Tel, Inc. 1-800-255-3924 (24 hours)

Date Prepared:

May 26, 1999

SECTION II - HAZARDOUS INGREDIENT INFORMATION

<u>Ingredient</u>	<u>CAS #</u>	<u>% vol</u>	<u>ACGIH TWA</u> <u>(Units)</u>	<u>ACGIH STEL</u> <u>(Units)</u>	<u>OSHA TWA</u> <u>(Units)</u>
Methyl Alcohol	67-56-1	80 - 90%	200 ppm	200 ppm	200 ppm
Water	7732-18-5	10 - 20%			

There is a "skin" notation that indicates that absorption through the skin can contribute significantly to overall exposure.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point:

148°F

Specific Gravity (Water=1):

0.850*

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Vapor Pressure (mm of Mercury): 97 @ 68°F
Melting Point: -98°C (-144°F)
Solubility (in Water): Totally miscible
Vapor Density (Air=1): 1.1
p.H.: Not applicable
Percent Volatile (by Weight): 80 - 90*
Evaporation Rate (Butyl Acetate=1): 5.9
Molecular Weight: 32.05
Appearance: Light blue liquid
Odor: Pungent alcohol odor
* Indicates the true property for the "solution".

SECTION IV - FIRE AND EXPLOSION DATA

Special Fire Fighting Procedures: Firefighters should use self-contained breathing apparatus with full face piece operated in pressure demand or other positive pressure mode, and wear full protective clothing. Methanol burns with a clean, clear flame, almost invisible in daylight.

Flashpoint and Method: 14°C (58°F)* (closed cup)

Extinguishing Media: Carbon dioxide, dry chemical, alcohol foam, and water.

Unusual Fire & Explosion Hazards: Moderate explosion hazard and dangerous fire hazard when exposed to heat, sparks, or flames and can react vigorously with oxidizing agents.

Flammable Limits (% by volume): 6 LEL 36 UEL

Autoignition Temperature: 388-470°C (730-878°F) - depending on method.

SECTION V - REACTIVITY DATA

Stability: Stable

Conditions and Materials to Avoid: Heat, strong oxidizing agents

Hazardous Polymerization: Will not occur

Hazardous Decomposition Products: Toxic gases and vapors (i.e., carbon monoxide, formaldehyde) may be released in a Methanol fire.

Incompatibility: Strong oxidizing agents such as nitrates, perchlorates or sulfuric acid.

SECTION VI - HEALTH HAZARD DATA/FIRST AID

Effects of Overexposure: Methanol is a poisonous, narcotic chemical that can affect the body

through inhalation, ingestion, and perhaps prolonged or repeated skin contact. Absorption by inhalation or ingestion is rapid and excretion is much slower than for ethyl alcohol, resulting in delayed effects or compounding of effects by repeated exposure. It is important to be aware that after ingestion or inhalation, initial symptoms may be only that of mild intoxication, but may become severe after 12 to 18 hours. Toxic effects are exerted upon the central nervous system, especially the optic nerve. Ingestion can produce blindness; 100-250 ml can be fatal. Symptoms of overexposure include dizziness, visual impairment, nausea, respiratory failure, muscular in coordination and narcosis. Prolonged or repeated skin contact may cause dermatitis, erythema, scaling, and possibly systemic effects. See also Section VII.

ROUTES OF ENTRY/EMERGENCY AND FIRST AID PROCEDURES

Eyes:	Wash eyes immediately with running water, lifting the lower and upper lids occasionally. Get medical attention as soon as possible.
Skin:	Remove contaminated clothing and wipe excess off. Wash affected area with soap and water; apply skin lotions. If skin irritation persists, get medical attention.
Inhalation:	Remove victim to fresh air at once. Restore and/or support breathing as required. Keep victim warm and at rest. Get medical attention as soon as possible. Prevent exposure to Methanol for seven (7) days.
Ingestion:	Get medical attention immediately. Induce vomiting with one (1) tablespoon of Ipecac or by touching the back of the throat (ONLY IF CONSCIOUS). Once vomiting has occurred, have the patient drink milk, water, or a solution of sodium bicarbonate (baking soda) in water - two (2) teaspoons per glass.
Reproductive Effects:	Reported to cause birth defects in rats exposed to 20,000 ppm
Tetratogenicity:	No
Metagenicity:	No
Carcinogenicity:	Not listed with IARC, NTP, ACGIH or OSHA as a carcinogen.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING

Precautions to be Taken in Handling and Storage:

Ground and electrically interconnect containers for transfer. Use spark proof tools. No smoking in areas of use or storage. Avoid prolonged or repeated breathing of vapor or contact with skin. Avoid contact with eyes. Contact lenses should not be worn while handling Methanol. Eye wash stations and safety showers should be available in area of use. Do not ingest! Store in

a well-ventilated, fireproof area, away from sources of heat, open flame, and ignition.

Other Precautions: Provide preplacement medical exams for industrially exposed workers, with emphasis on neurological and visual functions, liver and kidney systems. Provide suitable training to those working with Methanol. Monitor the workplace. Keep records.

Registrations/Certifications: Not applicable

NOTE: Most of these requirements are for Methanol. Since our solution is 80 - 90% by volume Methanol, the requirements listed above are very strict and should be followed closely.

SECTION VIII - SPECIAL PROTECTION AND CONTROL MEASURES

PERSONAL PROTECTIVE EQUIPMENT

Eye Protection: Safety glasses with side shields or face shield.
Respiratory Protection: Any air supplied respirator or self-contained breathing apparatus. Only NIOSH or OSHA approved equipment should be used.
Other: Impervious aprons, boots and face shields (8-inch min.) where splashing can occur.

VENTILATION

Local Exhaust: To meet TLV requirements, local exhaust should be used where vapor exposure is likely.
Mechanical (general): Controls must be spark proof and explosion proof.
Special: Not applicable
Other: Not applicable

SECTION IX - HANDLING OF SPILLS AND LEAKS

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

1. Remove all ignition sources.
2. Provide adequate ventilation.
3. Small quantities may be absorbed on paper towels. Evaporate in a safe place (such as fume hood). Burn paper in an approved incinerator or open pit away from buildings and people. Large quantities can be collected and atomized in a suitable combustion chamber. Spills in sensitive areas may be diluted and flushed to ground with a water spray. Do not flush to sewer or other confined space.
4. Spills should be reported according to Federal, State and Local regulations.

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Waste Disposal Methods: Absorb in vermiculite, dry sand, earth or a similar material and dispose in a secured sanitary landfill or dispose of via a licensed waste solvent disposal company.

Clean Water Act Requirements: Not applicable

Resource Conservation and Recovery Act (RCRA) Requirements: Methanol is assigned a hazardous waste number of U154 under 3001. It is considered a toxic waste.

SECTION X - TOXICOLOGICAL/ECOLOGICAL INFORMATION

Oral: Human LD (Lo) - 240 mg/kg
Dermal: Monkey LD (Lo) - 500 mg/kg
Inhalation: Human TC (Lo) - 86,000 mg/m³ - lacrimation; cough, other changes to lungs, thorax or respiration.
Carcinogenicity: Not listed in "Second Annual Report on Carcinogens", 1981, NTP.
Other Pertinent Data: Recommended std-air: TWA 200 ppm; C1 800 ppm/15m

SECTION XI - TRANSPORTATION DATA

D.O.T.: Proper Shipping Name - Methyl Alcohol
Hazard Class - Flammable Liquid
Label Required - Flammable Liquid
Identification Number - UN-1230
Other Pertinent Information - See 45 CFR 172.101, page 34625

SECTION XII - REGULATORY INFORMATION

FDA: Regulated under 21 CFR 176.200 (d) (3) as a component of defoaming agents which may be safely used as components of articles intended for use in producing, manufacturing, packing, processing, preparing, treating, packaging, transporting or holding food. Also regulated under 176.210 as a component of defoaming agents used in the manufacture of paper and paperboard. Approved as component of paper and paperboard in contact with dry food. [See 176.180 (b) (2)] Listed under 175.105 for use as component of adhesives.

USDA: Information unknown at time of publication.

Canadian TDG: Methanol, Flammable Liquid 3, UN-1230, Packing Group III
(See Hazardous Substances Labeling Guides - 9010.125)

TSCA: CAS # 67-56-1

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WHMIS: Canada B2, D1A
NFDA Rating: Health -1 Fire - 3 Reactivity - 0

SECTION XIII - USER INFORMATION

The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation, and verification. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable Federal, State and Local laws and regulations.

Relating to any party's use of or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete or otherwise misleading, this information relates to the material designated and may not be valid for such material used in combination with any other materials or in any process.